



Tủ sách ViOlympic

ĐẶNG MINH TUẤN - NGUYỄN THỊ BÍCH PHƯƠNG

Tự luyện

ViOlympic

5

TOÁN BẰNG
TIẾNG ANH lớp

Math ViOlympic



NHÀ XUẤT BẢN GIÁO DỤC VIỆT NAM

ĐẶNG MINH TUẤN - NGUYỄN THỊ BÍCH PHƯƠNG

TỦ SÁCH VIOLYMPIC

**TỰ LUYỆN
VIOLYMPIC TOÁN
BẰNG TIẾNG ANH**

(Tái bản lần thứ nhất)

LỚP 5

NHÀ XUẤT BẢN GIÁO DỤC VIỆT NAM

PREFACE

Dear beloved students!

The math contest via Internet (ViOlympic) is the National contest that has organized by the Ministry of Education and Training and implemented by the FPT Group, FPT University since the 2008 – 2009 academic year. From 2013 – 2014 academic year, the Math ViOlympic consists of compulsory 10 rounds, with round 1 to round 6 for self-practice, round 7 to round 10 for grade contests.

In order help students to familiarize with the fascinating test format, thinking stimulation and computer practice before competition, the Content Sub-committee – the National Organizing Committee has compiled the book "ViOlympic Math Contest Self-Practice". This volume consists of 4 books for grades of 4; 5; 8 and 9, each grade has one set with a 10 - round structure corresponding to 10 rounds presented on the website www.math.violympic.vn, each round is consistent with three-week curriculum of the Ministry of Education and Training.

When finishing each round in this book, students can access the Internet at address: www.math.violympic.vn to register for contest. Once on this page, students should read carefully the *Help section* and follow the instructions to get the best competition score.

We would like to thank the Nation Books Joint Stock Company – Vietnam Education Publishing House for publishing the books for students.

Any comments and recommendations for authors should be sent to email address at: violympic@moet.edu.vn or postal mailing address at: ViOlympic Room, FPT University at No. 8 Ton That Thuyet – My Dinh – Tu Liem – Hanoi.

We wish the students to study Mathematics with more and more passionate and improvement to earn top honors in school as well as ViOlympic competition.

AUTHORS

LỜI NÓI ĐẦU

Các em học sinh yêu quý!

Cuộc thi giải toán qua Internet (ViOlympic) là cuộc thi cấp Quốc gia do Bộ Giáo dục và Đào tạo tổ chức, Tập đoàn FPT, Trường Đại học FPT thực hiện, bắt đầu từ năm học 2008 – 2009. Từ năm học 2013 – 2014, ban tổ chức mở thêm cuộc thi giải Toán bằng Tiếng Anh VIOlympic với 10 vòng thi, từ vòng thi số 1 đến số 6 là vòng thi tự luyện, từ vòng thi số 7 đến vòng thi số 10 là vòng thi các cấp.

Để học sinh làm quen với dạng bài thi hấp dẫn, kích thích tư duy và luyện tập trước khi thi trên máy tính, Tiểu ban nội dung của Ban tổ chức cấp Quốc gia biên soạn bộ sách “Tự luyện VIOlympic Toán bằng Tiếng Anh”. Bộ sách này gồm 4 cuốn dành cho các lớp 4; 5; 8 và 9, mỗi lớp có một tập với cấu trúc 10 vòng thi tương ứng với 10 vòng thi trên trang www.math.violympic.vn, mỗi vòng thi tương ứng với ba tuần học theo phân phối chương trình của Bộ Giáo dục và Đào tạo.

Khi làm xong mỗi vòng thi trong cuốn sách này, các em có thể truy cập Internet, vào địa chỉ: www.math.violympic.vn để dự thi. Khi vào trang này, các em cần đọc kĩ phần *Trợ giúp* và làm theo hướng dẫn để có thể thi tốt.

Cảm ơn Công ty Cổ phần Sách dân tộc – Nhà xuất bản Giáo dục Việt Nam đã tạo điều kiện để cuốn sách tới được các em.

Các em hãy gửi các ý kiến góp ý cho các tác giả qua hòm thư điện tử: violympic@moet.edu.vn hoặc gửi thư qua bưu điện về địa chỉ: Phòng VIOlympic, Trường Đại học FPT, số 8 Tôn Thất Thuyết – Mỹ Đình – Từ Liêm – Hà Nội.

Chúc các em học môn Toán ngày càng say mê hơn, tiến bộ hơn và đạt kết quả cao nhất trong cuộc thi VIOlympic cũng như trong học tập.

CÁC TÁC GIẢ

INSTRUCTIONS FOR USING GRADE 5 BOOK

I. General instruction

"Self-study for 5th Grade Math ViOlympic" covers 10 rounds. From round 1 to round 8, each round consists of 2 corresponding contestation www.violympic.vn page. Round 9 and round 10, each round consists of 1 corresponding contestation www.violympic.vn pages.

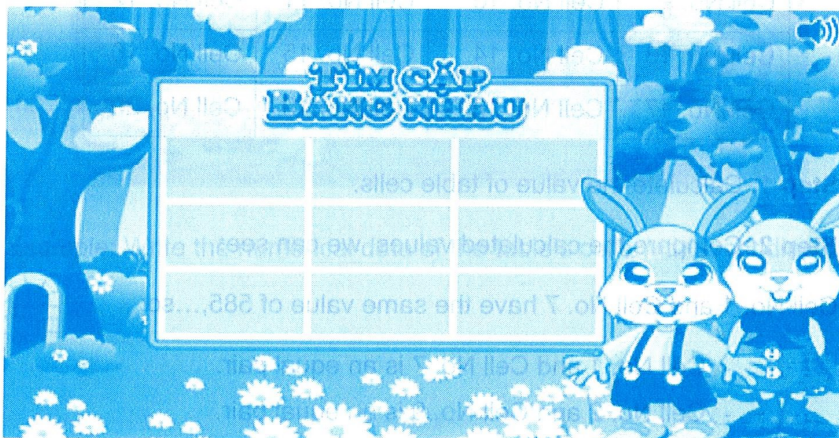
Students should read carefully to determine the questions of each test. Instructions in Section II should be referred for complex contests.

For the test format of "Choose the correct answer", "Complete results on ...", "Overcome obstacles", "Golden Frog", "Kid Champion", students could directly write answers on the questions.

To take advantage of the books to apply effectively for the website tests, the instructions for test formats of Treasure, Hunting, Matching, Arrangement are as follows:

II. Specific instructions for test format

1. Selection of equal pairs



Example: Find the equal pairs of equal results in the below table's cells.

417 + 168 1	172 + 465 2	453 + 374 3	237 + 415 4
380 + 272 5	813 6	392 + 193 7	555 + 209 8
637 9	519 + 308 10	475 + 354 11	518 + 318 12
583 + 246 13	452 + 361 14	464 + 372 15	764 16
481 + 373 17	680 + 182 18	862 19	528 + 326 20

Cells are numbered in the order of:

Cell No. 1	Cell No. 2	Cell No. 3	Cell No. 4
Cell No. 5	Cell No. 6	Cell No. 7	Cell No. 8
Cell No. 9	Cell No. 10	Cell No. 11	Cell No. 12
Cell No. 13	Cell No. 14	Cell No. 15	Cell No. 16
Cell No. 17	Cell No. 18	Cell No. 19	Cell No. 20

Step 1: Calculate the value of table cells.

Step 2: Compare the calculated values, we can see:

Cell No. 1 and Cell No. 7 have the same value of 585,...so:

- Cell No. 1 and Cell No. 7 is an equal pair.
- Cell No. 2 and Cell No. 9 is an equal pair.
- Cell No. 5 and Cell No. 4 is an equal pair.

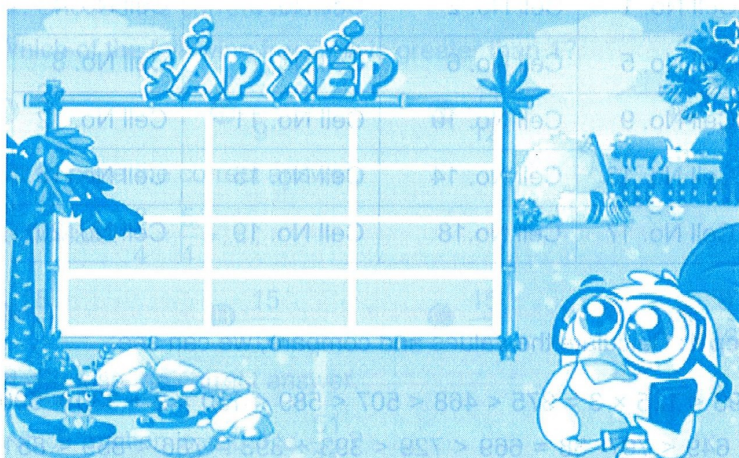
- Cell No. 16 and Cell No. 8 is an equal pair.
- Cell No. 6 and Cell No. 14 is an equal pair.
- Cell No. 10 and Cell No. 3 is an equal pair.
- Cell No. 13 and Cell No. 11 is an equal pair.
- Cell No. 12 and Cell No. 15 is an equal pair.
- Cell No. 17 and Cell No. 20 is an equal pair.
- Cell No. 18 and Cell No. 19 is an equal pair.

Step 3: Write the answers:

1 and 7 ; 9 and 2 ; 5 and 4 ; 16 and 8; 14 and 6 ;

10 and 3 ; 13 and 11 ; 12 and 15 ; 17 and 20 ; 18 and 19.

2. Order arrangement



Example: Write the numerical data of the table's cells with ascending order.

296 (1)	963 (2)	507 (3)	125×3 (4)
$746 + 455$ (5)	198 (6)	839 (7)	649 (8)
851 (9)	468 (10)	204×3 (11)	886 (12)
589 (13)	$393 + 393$ (14)	936 (15)	$130 \times 2 + 330$ (16)
$707 - 38$ (17)	439×2 (18)	729 (19)	$458 + 528$ (20)

Cells are numbered in the order of:

Cell No. 1	Cell No. 2	Cell No. 3	Cell No. 4
Cell No. 5	Cell No. 6	Cell No. 7	Cell No. 8
Cell No. 9	Cell No. 10	Cell No. 11	Cell No. 12
Cell No. 13	Cell No. 14	Cell No. 15	Cell No. 16
Cell No. 17	Cell No. 18	Cell No. 19	Cell No. 20

Step 1: Calculate the values and compare, we can see:

$$198 < 296 < 125 \times 3 = 375 < 468 < 507 < 589 < 130 \times 2 + 330 = 590 < 204 \times 3 = 612 < 649 < 707 - 38 = 669 < 729 < 393 + 393 = 786 < 839 < 851 < 439 \times 2 = 878 < 886 < 476 + 455 = 931 < 936 < 963 < 458 + 528 = 986$$

Step 2: Basing on comparison, we can write the number of cells with ascending order as follows:

$$(6) - (1) - (4) - (10) - (3) - (13) - (16) - (11) - (8) - (17) \\ - (19) - (14) - (7) - (9) - (18) - (12) - (5) - (15) - (2) - (20)$$

PART I. PRACTICAL TESTS

ROUND 1

TEST 1

EXAM 1 Golden Frog

Choose the correct answer in 4 available answers.



Question 1. Fill in the blank : $1\text{m}^2 = \dots\dots \text{cm}^2$.

Choose the correct answer.

- A** 10000 **B** 1000 **C** 100 **D** 100000

Question 2. Choose the correct answer.

Which of the following fractions is greater than 1?

- A** $\frac{2}{3}$ **B** $\frac{7}{9}$ **C** $\frac{11}{12}$ **D** $\frac{14}{8}$

Question 3. Choose the correct answer.

Calculate: $\frac{3}{4} \times \frac{5}{4} = \dots\dots$

- A** $\frac{8}{4}$ **B** $\frac{15}{16}$ **C** $\frac{15}{4}$ **D** $\frac{8}{16}$

Question 4. Choose the correct answer.

Which fraction is equal to $\frac{51}{34}$?

- A** $\frac{17}{11}$ **B** $\frac{3}{4}$ **C** $\frac{102}{48}$ **D** $\frac{9}{6}$

Question 5. Choose the correct answer.

Calculate: $\frac{1}{2} - \frac{2}{5} + \frac{5}{3} = \dots\dots$

- A** $\frac{49}{30}$ **B** $\frac{52}{30}$ **C** $\frac{53}{30}$ **D** $\frac{51}{30}$

Question 6. Choose the correct answer.

Which of the following sums is less than 1?

A $\frac{1}{3} + \frac{4}{5}$

B $\frac{3}{4} + \frac{1}{2}$

C $\frac{2}{3} + \frac{1}{4}$

D $\frac{3}{5} + \frac{2}{3}$

Question 7. Choose the correct answer.

Convert $\frac{7}{5}$ to a fraction with a denominator of 100.

A $\frac{7}{100}$

B $\frac{140}{100}$

C $\frac{700}{500}$

D $\frac{14}{100}$

Question 8. Fill in the blank.

37 minutes 48 seconds + 29 minutes 36 seconds = ... minutes 24 seconds.

Choose the correct answer.

A 67

B 66

C 65

D 68

Question 9. Choose the correct answer.

Write $\frac{123123}{456456}$ in simplest form.

A $\frac{123}{456}$

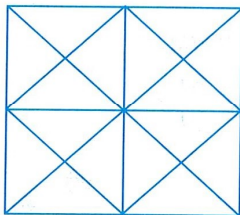
B $\frac{1}{2}$

C $\frac{41}{152}$

D $\frac{101}{1001}$

Question 10. Choose the correct answer.

How many triangles are there in the following figure?



A 44

B 43

C 42

D Uncountable

● EXAM 2 Kid Champion

Let's reach the intellectual peak by answering the questions below.



Question 1. Find x if $\frac{7}{12} + \frac{x}{3} = \frac{5}{4}$.

Answer: The value of x is

Question 2. The average of two numbers is 252. The greater number is 42 units more than the smaller number. Find the two numbers.

Answer: The greater number is

The smaller number is

Question 3. Write $7\frac{3}{4}$ as an improper fraction.

Answer: The result is

Question 4. Compare: $\frac{23}{25}$ and $\frac{11}{12}$.

Answer: $\frac{23}{25}$ $\frac{11}{12}$.

Question 5. 6 pizzas cost \$12. How much does Jane have to pay for 200 pizzas?

Answer: Jane has to pay \$... for 200 pizzas.

Question 6. Fill in the blank: $2\frac{1}{7} + 3\frac{2}{7} = \frac{\dots\dots}{7}$.

Answer: The correct number fill in the blank is

Question 7. Find x if $\frac{1}{4} : \frac{1}{x} = \frac{1}{20}$.

Answer: The value of x is

Question 8. Calculate: $\frac{75}{100} + \frac{18}{21} + \frac{19}{32} + \frac{1}{4} + \frac{3}{21} + \frac{13}{32}$.

Answer: The result is

Question 9. It took six workers, three hours to do a work. How many workers are needed to do the work in two hours?

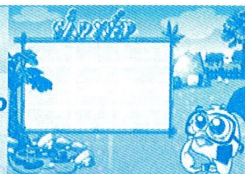
Answer: There are workers needed to do the work in two hours.

Question 10. If both numerator and denominator of a fraction are increased by 3 units then the new fraction will be equal to $\frac{6}{17}$. Find the original fraction if the sum of its numerator and its denominator is 40.

Answer: This fraction is

EXAM 3 Arrangement

Arrange numbers or calculations in order from least to greatest then fill their sequence numbers in ○ below.



$\frac{13}{100}$	$\frac{3}{2}$	$\frac{8}{7}$	$\frac{1}{3}$
1	2	3	4
$\frac{2}{5}$	$\frac{21}{100}$	$\frac{1}{4}$	$\frac{11}{100}$
5	6	7	8
$\frac{7}{100}$	$\frac{1}{2}$	$\frac{7}{6}$	$\frac{5}{4}$
9	10	11	12
$\frac{3}{4}$	$\frac{1}{100}$	$\frac{23}{100}$	$\frac{6}{5}$
13	14	15	16
$\frac{17}{100}$	$\frac{19}{100}$	$\frac{3}{100}$	$\frac{9}{100}$
17	18	19	20

The correct order is:

○ → ○ → ○ → ○ → ○ → ○ → ○ → ○ → ○ → ○

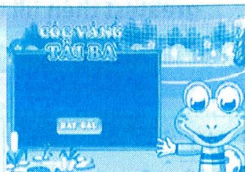
○ ← ○ ← ○ ← ○ ← ○ ← ○ ← ○ ← ○ ← ○ ← ○

TEST 2

EXAM 1

Golden Frog

Choose the correct answer in 4 available answers.



Question 1. Choose the correct answer.

$$\frac{3}{10} + \frac{1}{2} = \dots\dots$$

A $\frac{7}{5}$

B $\frac{4}{5}$

C $\frac{6}{5}$

D $\frac{3}{10}$

Question 2. Choose the correct answer.

Which of the following expressions is equal to $\frac{8}{30}$?

A $\frac{11}{30} - \frac{4}{20}$

B $\frac{2}{30} \times \frac{4}{30}$

C $\frac{8}{15} : \frac{1}{2}$

D $\frac{1}{15} + \frac{1}{5}$

Question 3. Choose the correct answer.

Find the value of x if $\frac{2}{3} \times x = \frac{3}{2}$.

A $\frac{4}{3}$

B $\frac{2}{3}$

C $\frac{1}{9}$

D $\frac{9}{4}$

Question 4. Choose the correct answer.

Calculate: $4 : \frac{3}{7} + \frac{1}{2}$.

A $\frac{49}{6}$

B $9\frac{5}{6}$

C $\frac{31}{14}$

D $2\frac{3}{14}$

Question 5. Choose the correct answer.

Charlie has eighteen pens more than Bill. Bill has one third as pen as Charlie. How many pens does Bill have?

A 9 pens

B 6 pens

C 3 pens

D 2 pens

Question 6. Choose the correct answer.

Write $\frac{42}{63}$ in lowest term.

A $\frac{4}{6}$

B $\frac{4}{9}$

C $\frac{2}{3}$

D $\frac{6}{9}$

Question 7. Choose the correct answer.

Which of the following fractions is greater than $\frac{24}{36}$?

A $\frac{9}{12}$

B $\frac{8}{18}$

C $\frac{7}{12}$

D $\frac{5}{9}$

Question 8. Choose the correct answer.

The sum of two numbers is the greatest – four digit number and their ratio is the smallest – two digit number. Find these numbers.

A 900 and 99

B 909 and 9090

C 989 and 10

D 999 and 989

Question 9. Choose the correct answer.

Alice's mother is now four times as old as she. Four years ago, her mother was thirty years more than her. How old is Alice now?

A 12

B 6

C 10

D 8

Question 10. Choose the correct answer.

Find the 123rd term of the following sequence:

1; 2; 0; 0; 3; 1; 2; 0; 0; 3; 1; 2; 0; 0; 3;

A 1

B 2

C 0

D 3

EXAM 2 Kid Champion

Let's reach the intellectual peak by answering the questions below.



Question 1. Calculate: $\frac{3}{5} : 2 + \frac{1}{2}$. (Write your answer as a fraction in simplest form)

Answer: The result is

Question 2. There are 40 students in a class. $\frac{2}{5}$ of them are good at Math. How many students in the class are not good at Math?

Answer: There are students.

Question 3. Convert $\frac{3}{4}$ to a fraction with a denominator of 100.

Answer: $\frac{3}{4} = \frac{\dots}{\dots}$.

Question 4. Find x if x is a natural number and $\frac{8}{15} : x = \frac{4}{75}$.

Answer: The value of x is

Question 5. Write the following fractions in order from greatest to least

$\frac{3}{5}, \frac{8}{7}, \frac{1}{2}, \frac{10}{9}, \frac{4}{5}$.

Answer: The correct order is: ; ; ; ;

Question 6. Find the natural number x if $\frac{3}{8} < \frac{x}{4} < \frac{31}{56}$.

Answer: The value of x is

Question 7. Compare: $\frac{1}{2} + \frac{1}{4} + \frac{1}{8}$ and $\frac{7}{8}$.

Answer: $\frac{1}{2} + \frac{1}{4} + \frac{1}{8} \dots \frac{7}{8}$.

Question 8. Calculate: $4\frac{2}{5} + 5\frac{6}{9} + 2\frac{3}{4} + \frac{3}{5} + \frac{1}{3} + \frac{1}{4}$.

Answer: The result is

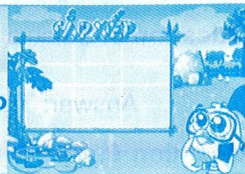
Question 9. The sum of two numbers is 1200. If the ratio of these numbers is 3 : 7 then the smaller number is.....

Question 10. 7 hamburgers and 5 ice creams cost \$32. 10 hamburgers and 5 ice creams cost \$35. How much does a hamburger cost?

Answer: A hamburger cost \$.....

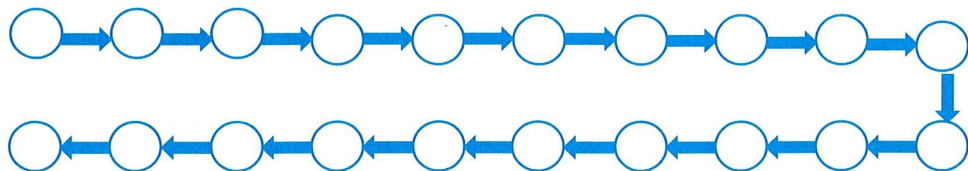
EXAM 3 Arrangement

Arrange numbers or calculations in order from least to greatest then fill their sequence numbers in ○ below.



$\frac{7}{2}$	$\frac{17}{3}$	$\frac{49}{8}$	$\frac{18}{9}$
1	2	3	4
$\frac{59}{10}$	$\frac{17}{9}$	$\frac{35}{6}$	5
5	6	7	8
$\frac{23}{4}$	$\frac{11}{2}$	$\frac{53}{9}$	$\frac{29}{5}$
9	10	11	12
$\frac{17}{10}$	$\frac{41}{7}$	$\frac{5}{2}$	$\frac{19}{9}$
13	14	15	16
6	$\frac{9}{2}$	$\frac{19}{8}$	$\frac{47}{8}$
17	18	19	20

The correct order is:



ROUND 2

TEST 1

EXAM 1 Matching

Choose pairs of numbers or calculations have the same value in the following table's cells then fill their sequence number in below.



$\frac{1}{3} + \frac{2}{5}$ 	$\frac{1}{5} + \frac{1}{7}$ 	$\frac{7}{3} \times \frac{1}{3}$ 	$\frac{4}{11}$
$\frac{1}{5} + \frac{2}{3} \times \frac{2}{5}$ 	$\frac{7}{12}$ 	$\frac{9}{21}$ 	$\frac{7}{9}$
$\frac{3}{4}$ 	$\frac{1}{2} : \frac{3}{5}$ 	$\frac{2}{7} \times \frac{6}{5}$ 	$\frac{11}{15}$
$1\frac{2}{11}$ 	$\frac{1}{3} : \frac{4}{7}$ 	$\frac{5}{6}$ 	$\frac{6}{11} + \frac{7}{11}$
$\frac{3}{11} + \frac{1}{11}$ 	$\frac{7}{15}$ 	$\frac{1}{4} + \frac{1}{4} + \frac{1}{4}$ 	$\frac{3}{7}$

Answer: Pairs of numbers or calculations have the same value are:

and ; and ; and ; and

and ; and ; and ; and

and ; and

EXAM 2 Jump Over

You have to drive your car passing 10 obstacles to finish. In order to overcome each obstacle, you have to answer correctly one question in that obstacle. Are you ready?



Question 1. Find the least common denominator of $\frac{1}{15}$ and $\frac{5}{12}$.

Answer: The least common denominator of $\frac{1}{15}$ and $\frac{5}{12}$ is

Question 2. Write $\frac{27}{63}$ in lowest term.

Answer: The result is

Question 3. Convert 5km 5m to m.

Answer: 5km 5m =m.

Question 4. Write two next fractions in the sequence: $\frac{7}{9}, \frac{11}{12}, \frac{15}{15}, \frac{19}{18}, \dots$

Answer: Two next fractions in this sequence are ... and ...

Question 5. Find the area of the following rectangle in square centimeter if it's perimeter is 76cm.



Answer: The area of this rectangle iscm². 25cm

Question 6. The average of 63; 35 and X is equal to 45. Find X.

Answer: The value of X is

Question 7. Find a fraction if the sum of it's denominator and it's numerator is 27 and it equals $\frac{4}{5}$.

Answer: This fraction is

Question 8. Which sign (+; -; ×; ÷) makes the sentence come true?

$$\frac{5}{2} \times \frac{5}{3} \dots \frac{9}{3} = \frac{7}{6}.$$

Answer: The correct sign is

Question 9. Find the least 5 - digit number such that the sum of its digits is 15.

Answer: This number is

Question 10. Calculate: $1\frac{2}{3} \times 1\frac{2}{5} \times 1\frac{2}{7} \times \dots \times 1\frac{2}{99}$.

Answer: The result is

(Write your answer as a fraction in simplest form.)

● EXAM 3 Grid Ins

Fill in the blanks with the correct answers to answer 10 questions below.



Question 1. Calculate: $\frac{9}{7} - \frac{5}{6}$.

Answer: The result is

Question 2. Compare: $\frac{2}{5} + \frac{1}{5}$ and $\frac{3}{2} \times \frac{1}{2}$.

Answer: $\frac{2}{5} + \frac{1}{5} \dots \frac{3}{2} \times \frac{1}{2}$.

Question 3. Find x if $\frac{2}{7} + x = \frac{5}{3}$.

(Write your answer as a fraction in simplest form.)

Answer: The value of x is

Question 4. Convert 5000cm^2 to dm^2 .

Answer: $5000\text{cm}^2 = \dots\dots\text{dm}^2$.

Question 5. The sum of mother's age and daughter's age is 48 years and daughter is $\frac{1}{3}$ as old as mother. How old is daughter?

Answer: Daughter is $\dots\dots$ years old.

Question 6. Two iPhone 6 Plus mobiles cost \$598. How much do five iPhone 6 Plus mobiles cost?

Answer: Five iPhone 6 Plus mobiles cost \$.....

Question 7. Find m if m is divisible by 100 and $6275 < m < 6400$.

Answer: The value of m is $\dots\dots$

Question 8. Calculate: $\frac{1}{2 \times 3} + \frac{1}{3 \times 4} + \frac{1}{4 \times 5} + \dots + \frac{1}{98 \times 99}$.

(Write your answer as a fraction in simplest form.)

Answer: The result is $\dots\dots$

Question 9. Find the last digit of the product:

$$5 \times 15 \times 25 \times \dots\dots \times 95.$$

Answer: The last digit of the product is $\dots\dots$

Question 10. If both denominator and numerator of fraction $\frac{14}{19}$ are decreased

by X units then new fraction will be equal to $\frac{2}{3}$. Find X .

Answer: The value of X is $\dots\dots$

TEST 2

EXAM 1 Matching

Choose pairs of numbers or calculations have the same value in the following table's cells then fill their sequence number in below.



$\frac{15}{7}$		$\frac{2}{3} \times \frac{1}{5}$		$\frac{1}{3} + \frac{1}{5}$		$\frac{7}{6}$	
$\frac{1}{3} : 8$		$\frac{16}{25}$		$\frac{1}{9} + \frac{2}{3}$		$\frac{5}{4}$	
$\frac{151515}{121212}$		$\frac{2}{3} : \frac{3}{5}$		$\frac{11}{9}$		$\frac{1}{7} : \frac{1}{3} : \frac{1}{5}$	
$\frac{2+3 \times 4}{18}$		$7 \times \frac{1}{2} \times \frac{1}{3}$		$1 + \frac{1}{9}$		$\frac{1}{5} + \frac{1}{2} - \frac{1}{6}$	
$\frac{3 \times 5 + 1}{12 + 13}$		$\frac{5}{4} \times \frac{1}{3} : 10$		$\frac{1}{3} - \frac{1}{5}$		$\frac{1}{3} : \frac{3}{11}$	

Answer: Pairs of numbers or calculations have the same value are:

and ; and ; and ; and

and ; and ; and ; and

and ; and

EXAM 2

Jump Over

You have to drive your car passing 10 obstacles to finish. In order to overcome each obstacle, you have to answer correctly one question in that obstacle. Are you ready?



Question 1. Calculate: $\frac{5}{9} - \frac{2}{5}$.

Answer: The result is

Question 2. Choose the correct answer.

Which of the following calculations is equal to $\frac{67}{100}$?

- (A) $\frac{6}{100} + \frac{7}{100}$ (B) $\frac{7}{10} - \frac{7}{100}$ (C) $\frac{6}{10} + \frac{7}{100}$ (D) $\frac{7}{10} - \frac{7}{100}$

Question 3. Choose the correct answer.

Which of the following fractions is the greatest?

- (A) $\frac{19}{5}$ (B) $\frac{11}{3}$ (C) $\frac{27}{7}$ (D) $\frac{35}{9}$

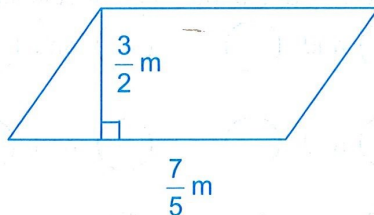
Question 4. Write $7\frac{1}{3}$ as an improper fraction.

Answer: $7\frac{1}{3} = \frac{\dots\dots}{\dots\dots}$.

Question 5. Find x if $\frac{1}{7} + \frac{1}{5} - x = \frac{10}{35}$.

Answer: The value of x is

Question 6. Find the area of the following parallelogram in square centimeter.



Answer: The area of the parallelogram is cm^2 .

Question 7. Find the value of $\frac{3}{5} + \frac{7}{5} \times b$ if $b = \frac{1}{2}$.

Answer: $\frac{3}{5} + \frac{7}{5} \times b = \dots\dots$

(Write fraction in simplest form.)

Question 8. The sum of two natural numbers is 520 and there are nineteen other natural numbers between them. Find the two numbers.

Answer: The greater number is

The smaller number is

Question 9. If delete the last digit of a 3-digit number then it will be decreased by 93 units. Find the original number.

Answer: The original number is

Question 10. How many 2-digit numbers are divisible by 3?

Answer: There are numbers.

● EXAM 3 Grid Ins

Fill in the blanks with the correct answers to answer 10 questions below.



Question 1. Write $5\frac{1}{6}$ as an improper fraction.

Answer: $5\frac{1}{6} = \frac{\dots\dots}{\dots\dots}$

Question 2. The sum of the length and the width of a rectangle is 24cm. Find it's perimeter.

Answer: The perimeter of the rectangle iscm.

Question 3. Write fraction $\frac{42}{70}$ in lowest term.

Answer: The result is

Question 4. Which sign (+; -; ×; ÷) make the sentence come true:

$$\frac{5}{2} \dots \frac{3}{7} = \frac{15}{14} ?$$

Answer: The correct sign is

Question 5. Calculate: $2\frac{1}{3} \times 1\frac{3}{5}$.

(Write your answer as a fraction in simplest form.)

Answer: The result is

Question 6. $\frac{3}{5}$ of the tickets sold at a zoo were child tickets. How many child tickets did the zoo sell if it sold 65 tickets in altogether?

Answer: child tickets were sold.

Question 7. Convert 3 tons 75 kilograms to kilogram.

Answer: 3 ton 75kg =kg.

Question 8. It took 10 people, 7 days to complete a work. How many people was needed in order to complete this work in 5 days?

Answer: There are ... people needed.

Question 9. The denominator of a fraction is 2 units more than it's numerator and this fraction is equal to $\frac{2}{3}$. Find this fraction.

Answer: This fraction is

Question 10. Compare: $\frac{1}{2} + \frac{3}{4} + \frac{5}{6}$ and $\frac{5}{4} + \frac{1}{6} + \frac{2}{3}$.

Answer: $\frac{1}{2} + \frac{3}{4} + \frac{5}{6} \dots \frac{5}{4} + \frac{1}{6} + \frac{2}{3}$.

ROUND 3

TEST 1

EXAM 1 Grid Ins

Fill in the blanks with the correct answers to answer 10 questions below.



Question 1. Calculate: $1\frac{3}{4} + 2\frac{1}{5}$.

(Write your answer as a fraction in simplest form.)

Answer: The result is

Question 2. Two days ago, Angela ate $\frac{1}{3}$ of a cake. Yesterday, she ate $\frac{2}{5}$ of this cake. What fraction of this cake did Angela eat in altogether?
(Write your answer as a fraction in lowest term.)

Answer: Angela ate of this cake in altogether.

Question 3. Calculate: $1\frac{7}{9} : 3\frac{5}{9}$.

(Write your answer as a fraction in simplest form.)

Answer: The result is

Question 4. Thomas is 12 years old. His father is $3\frac{1}{2}$ as old as he. His mother is

3 years younger than his father. How old is Thomas's mother?

Answer: Thomas's mother is ... years old.

Question 5. Find two consecutive natural numbers if their sum is 2015.

Answer: The greater number is

The smaller number is

Question 6. How many natural numbers are not greater than 1665 and divisible by 5?

Answer: There are numbers.

Question 7. Calculate:

$$\left(\frac{1}{2}+1\right) \times \left(\frac{1}{3}+1\right) \times \left(\frac{1}{4}+1\right) \times \dots \times \left(\frac{1}{9}+1\right).$$

Answer: The result is

Question 8. The sum of three consecutive even numbers is 960. Find the three numbers.

Answer: The three numbers are ; ;

(Write the numbers in order from least to greatest.)

Question 9. Find m if m is a natural number and $\frac{2}{5} < \frac{m}{8} < \frac{3}{5}$.

Answer: The value of m is

Question 10. If we put the digit 1 at the beginning of a 5-digit number, we get a number that is one third as number gotten if we put the digit 1 at the end of this number as. Find this number.

Answer: This number is

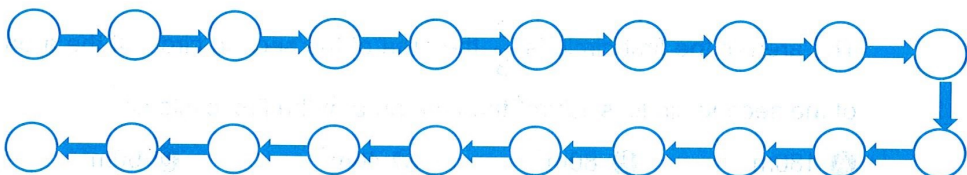
EXAM 2 Arrangement

Arrange numbers or calculations in order from least to greatest then fill their sequence numbers in below.



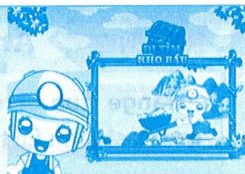
$\frac{1}{200}$	$\frac{2}{49}$	$\frac{4}{47}$	$\frac{1}{2} \times \frac{1}{8} \times \frac{1}{50}$
1	2	3	4
$\frac{5}{46}$	$\frac{1}{100} : 10$	$\frac{1}{350} - \frac{1}{700}$	$\frac{5}{45} + \frac{1}{45}$
5	6	7	8
$\frac{1}{50}$	$\frac{1}{300}$	$\frac{3}{47}$	$\left(\frac{1}{2} - \frac{1}{4}\right) \times \frac{1}{125}$
9	10	11	12
$\frac{1}{90} \times \frac{1}{10}$	$\frac{7}{45}$	$\frac{1}{100}$	$\frac{5}{47}$
13	14	15	16
$3 \times \frac{1}{49}$	$\frac{1}{600}$	$\frac{1}{20} \times \frac{1}{20}$	$1 - \frac{48}{49}$
17	18	19	20

The correct order is:



EXAM 3 Treasure Hunting

Let's help the miner to go through the maze by answering 10 questions to reach the destination.



Question 1. Choose the correct answer.

Which of the following fractions is the greatest?

A $\frac{1}{23}$

B $\frac{5}{114}$

C $\frac{1}{24}$

D $\frac{5}{115}$

Question 2. Choose the correct answer.

Calculate: $\frac{13}{12} - 1\frac{2}{3} \times \frac{1}{4}$.

A $\frac{5}{12}$

B $\frac{7}{12}$

C $\frac{3}{4}$

D $\frac{2}{3}$

Question 3. Choose the correct answer.

The average of two numbers is 95. The first number is $\frac{2}{3}$ of the second number. Find the two numbers.

A 76 and 114

B 57 and 133

C 152 and 38

D 107 and 83

Question 4. Choose the correct answer.

If $x : 2\frac{1}{3} = 3\frac{2}{7}$ then the value of x is:

A $7\frac{1}{3}$

B $7\frac{2}{7}$

C $7\frac{2}{3}$

D $7\frac{1}{7}$

Question 5. Choose the correct answer.

The area of the first circle is $\frac{2}{3}$ the area of the second circle. If the area of the second circle is 120m^2 then the area of the first circle is:

A 180m^2

B 80m^2

C 40m^2

D 60m^2

Question 6. Choose the correct answer.

Which of the following sentences is false?

(A) $\frac{2}{3} > \frac{3}{4}$

(B) $\frac{2015}{2014} < \frac{2014}{2013}$

(C) $\frac{131313}{252525} = \frac{26}{50}$

(D) $\frac{3}{5} = \frac{39}{65}$

Question 7. Choose the correct answer.

The next fraction in the sequence: $\frac{1}{2}; \frac{1}{5}; \frac{1}{8}; \frac{1}{11}; \dots$ is

(A) $\frac{1}{15}$

(B) $\frac{1}{13}$

(C) $\frac{1}{14}$

(D) Another fraction.

Question 8. Choose the correct answer.

The average of all 5-digit even numbers is

(A) 54999

(B) 109998

(C) 50000

(D) 100000

Question 9. Choose the correct answer.

Given the fraction $\frac{15}{17}$. If both denominator and numerator of this

fraction are decreased by X units then the new fraction will be equal to $\frac{52}{65}$.

The value of X is

(A) 5

(B) 8

(C) 9

(D) 7

Question 10. Choose the correct answer.

Calculate: $A = \frac{1 \times 2 \times 3 + 2 \times 4 \times 6 + 3 \times 6 \times 9}{2 \times 3 \times 12 + 4 \times 6 \times 24 + 6 \times 9 \times 36}$.

(A) $\frac{1}{4}$

(B) $\frac{1}{3}$

(C) $\frac{1}{2}$

(D) $\frac{1}{12}$

TEST 2

EXAM 1

Grid Ins

Fill in the blanks with the correct answers to answer 10 questions below.



Question 1. Calculate: $1\frac{2}{5} \times 3\frac{5}{7}$.

(Write your answer as a fraction in simplest form.)

Answer: The result is

Question 2. Jessica is 8 years old. Her grandmother is $7\frac{1}{2}$ of her age. How old is Jessica's grandmother?

Answer: Her grandmother is years old.

Question 3. Calculate: $2\frac{1}{15} + \frac{1}{3} \times 3\frac{1}{5}$.

(Write your answer as a fraction in simplest form.)

Answer: The result is

Question 4. There are 49 students in a class. Boy students are $\frac{3}{4}$ the number of girl students. How many girl students are there in this class?

Answer: There are girl students.

Question 5. Find a fraction if the sum of its denominator and its numerator is 52 and its denominator is 18 units more than its numerator.

Answer: This fraction is

Question 6. Compare: $A = \frac{1+3+5+\dots+119}{60}$ and $B = \frac{2+4+6+\dots+118}{59}$.

Answer: A B.

Question 7. Find the value of $5 \times b + 2 \times c$ if $\overline{2005bc}$ is divisible by 2; 5 and 9.

Answer: $5 \times b + 2 \times c = \dots\dots$

Question 8. Let $A = 12345678910111213\dots\dots$

(A was written by consecutive natural numbers.)

Find the last digit of A if A has 103 digits.

Answer: The last digit of A is $\dots\dots$

Question 9. Find the last digit of the product:

$$(1+2+3+\dots+9) \times (1+2+3+\dots+9) \times \dots \times (1+2+3+\dots+9).$$

Answer: The last digit of this product is $\dots\dots$

Question 10. There are 60 students in a class. If 35 students play badminton, 30 students play table tennis and 7 students do not play any sports. How many students play both badminton and table tennis?

Answer: There are $\dots\dots$ students.

EXAM 2 Arrangement

Arrange numbers or calculations in order from least to greatest then fill their sequence numbers in ○ below.



$\frac{1}{5}$	$\frac{7}{8}$	$1\frac{6}{7}$	$\frac{2}{3}$
○ 1	○ 2	○ 3	○ 4
$\frac{4}{5}$	$1\frac{4}{5}$	$1\frac{1}{3}$	2
○ 5	○ 6	○ 7	○ 8
$1\frac{2}{3}$	$\frac{5}{6}$	$\frac{3}{4}$	$\frac{1}{4}$
○ 9	○ 10	○ 11	○ 12
$\frac{1}{3}$	$1\frac{7}{8}$	$1\frac{3}{4}$	$1\frac{5}{6}$
○ 13	○ 14	○ 15	○ 16
1	$1\frac{1}{2}$	$\frac{1}{2}$	$\frac{6}{7}$
○ 17	○ 18	○ 19	○ 20

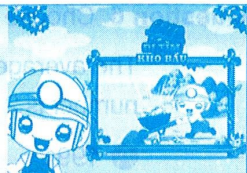
The correct order is:

○ → ○ → ○ → ○ → ○ → ○ → ○ → ○ → ○ → ○

○ ← ○ ← ○ ← ○ ← ○ ← ○ ← ○ ← ○ ← ○ ← ○

EXAM 3 Treasure Hunting

Let's help the miner to go through the maze by answering 10 questions to reach the destination.



Question 1. Choose the correct answer.

Which of the following fractions is equal to $\frac{2}{3}$?

(A) $\frac{181818}{212121}$

(B) $\frac{16}{24}$

(C) $\frac{14}{20}$

(D) $\frac{27}{18}$

Question 2. Choose the correct answer.

Calculate: $\left(\frac{1}{3} + 2\frac{1}{4}\right) : \frac{7}{12} = \dots$

(A) $\frac{7}{31}$

(B) $\frac{38}{144}$

(C) $\frac{38}{12}$

(D) $\frac{31}{7}$

Question 3. Choose the correct answer.

The sum of the number of lions and monkeys in a zoo is 40 and lions are $\frac{1}{3}$ the number of monkeys. How many monkeys are there in the zoo?

(A) 10

(B) 27

(C) 18

(D) 30

Question 4. Choose the correct answer.

The average of two numbers is 95. The first number is $\frac{2}{3}$ of the second number. Find the first number.

(A) 38

(B) 114

(C) 76

(D) 57

Question 5. Choose the correct answer.

Find x if $\left(\frac{1}{2} + \frac{1}{3} + \frac{1}{4}\right) \times x = 1 + \frac{2}{3} + \frac{1}{2}$.

(A) 4

(B) 3

(C) 2

(D) 5

Question 6. Choose the correct answer.

The average of three numbers is 1988. The first number is 1984. The third number is 2 units more than the second number. Find the third number.

(A) 1991

(B) 1989

(C) 1988

(D) 1985

Question 7. Choose the correct answer.

The sum of two fractions is $\frac{45}{23}$ and the first fraction is one quarter of the second fraction. Find the first fraction.

(A) $\frac{9}{23}$

(B) $\frac{36}{23}$

(C) $\frac{7}{23}$

(D) $\frac{28}{23}$

Question 8. Choose the correct answer.

The average of 5 consecutive odd numbers is 123. Find the greatest number.

(A) 123

(B) 127

(C) 125

(D) 129

Question 9. Choose the correct answer.

Find n if n is a natural number and $\frac{n}{7} < \frac{2}{3} < \frac{n+1}{7}$.

(A) 1

(B) 2

(C) 3

(D) 4

Question 10. Choose the correct answer.

The sum of two numbers is 463 and there are eighteen even numbers between these numbers. Find the greater number.

(A) 213

(B) 249

(C) 250

(D) 241

ROUND 4

TEST 1

EXAM 1 Golden Frog

Choose the correct answer in 4 available answers.



Question 1. Choose the correct answer.

Fill in the blank with the correct decimal number: $\frac{5}{10}$ m = m.

- (A) 0.0005 (B) 0.5 (C) 0.05 (D) 0.005

Question 2. Choose the correct answer.

Write $\frac{16}{1000}$ as a decimal number.

- (A) 1.6 (B) 0.16 (C) 0.016 (D) 16000

Question 3. Choose the correct answer.

In 721.986, in which place is the 9?

- (A) tens (B) tenths (C) hundreds (D) hundredths

Question 4. Choose the correct answer.

Fill in the blank with the correct number: $3\text{m}^2 7\text{dm}^2 = \dots\dots\dots \text{m}^2$.

- (A) 3.7 (B) 3.007 (C) 3.0007 (D) 3.07

Question 5. Choose the correct answer.

Write $21\frac{3}{10}$ as a decimal number.

- (A) 21.3 (B) 2.13 (C) 0.213 (D) 21.03

Question 6. Choose the correct answer.

Write 12.0205 as a decimal fraction.

- (A) $\frac{120205}{1000}$ (B) $\frac{12205}{10000}$ (C) $\frac{1225}{1000}$ (D) $\frac{120205}{10000}$

Question 7. Choose the correct answer.

Which of the following fractions is equal to 0.625?

A $\frac{5}{8}$

B $\frac{625}{100}$

C $\frac{25}{4}$

D $\frac{15}{16}$

Question 8. Choose the correct answer.

Fill in the blank with a correct number: $9.\square 234 < 9.1216$.

A 3

B 2

C 1

D 0

Question 9. Choose the correct answer.

Calculate and write the result by decimal number.

$$\frac{1}{2 \times 3} + \frac{1}{3 \times 4} + \frac{1}{4 \times 5} + \dots + \frac{1}{9 \times 10}$$

A 0.4

B 0.5

C 0.25

D 0.75

Question 10. Choose the correct answer.

Find m if m is a natural number and $m < 16.7645 < m + 1$.

A 16

B 17

C 14

D 15

EXAM 2 Kid Champion

Let's reach the intellectual peak by answering the questions below.



Question 1. In 376.258 which digit is in the tens place?

Answer: The digit in the tens place is

Question 2. In 342.156 which digit is in the hundredths place?

Answer: The digit in the hundredths place is

Question 3. Find the next decimal number in the sequence:

3.01 ; 3.02 ; 3.03 ;

Answer: The next decimal number in this sequence is

Question 4. Write $\frac{324}{100}$ as a decimal number.

Answer: The result is

Question 5. Calculate: $2.76 + 5.23$.

Answer: The result is

Question 6. Convert 25357cm^2 to m^2 .

Answer: $25357\text{cm}^2 = \dots\dots\text{m}^2$.

Question 7. Convert 42.3m to m and cm .

Answer: $42.3\text{m} = \dots\dots\text{m}\dots\dots\text{cm}$.

Question 8. Find x if x is a natural number and $0.79 < \frac{x}{25} < 0.81$.

Answer: The value of x is

Question 9. Find the least 5 - distinct digit decimal number.

Answer: The least 5 - distinct digit decimal number is

Question 10. Find the greatest value of m if m is a natural number and $3.72 + m < 12.36$.

Answer: The greatest value of m is

EXAM 3 Grid Ins

Fill in the blanks with the correct answers to answer 10 questions below.



Question 1. In 718.3452 which digit is in the thousandths place?

Answer: The digit in the thousandths place is

Question 2. Compare: 0.4 and $\frac{5}{100}$.

Answer: $0.4 \dots\dots \frac{5}{100}$.

Question 3. Write the following decimal numbers in order from least to greatest:

4.6 ; 5.03 ; 3.45 ; 5.3 ; 4.06.

Answer: The correct order is: ... ; ... ; ... ; ... ; ...

Question 4. Fill in the blank with the correct decimal number:

$4\text{dm}^2 35\text{cm}^2 = \dots\dots\text{dm}^2$.

Answer: The correct decimal number fill in the blank is

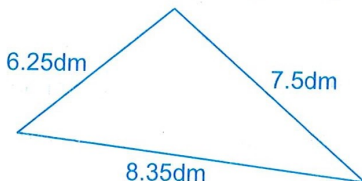
Question 5. Calculate: $b + 2.5 + a$ if $a + b = 34.754$.

Answer: $b + 2.5 + a = \dots\dots$

Question 6. Calculate: $4.53 + 12.76 + 23.28$.

Answer: The result is

Question 7. Calculate the perimeter of the following triangle:



Answer: The perimeter of the triangle isdm.

Question 8. Find n if n is a natural number and $n + 1 < 4.75523 < n + 2$.

Answer: The value of n is

Question 9. Compare: $\overline{a.2c} + \overline{7.b5}$ and $\overline{a.bc} + 7.23 + 0.02$.

Answer: $\overline{a.2c} + \overline{7.b5}$ $\overline{a.bc} + 7.23 + 0.02$.

Question 10. Find a , b if they are two consecutive natural numbers and $a < 1.2 + 1.3 + 1.4 < b$.

Answer: The value of a is

The value of b is

TEST 2

EXAM 1 Golden Frog

Choose the correct answer in 4 available answers.



Question 1. Choose the correct answer.

Fill in the blank with the correct number:

$$\frac{6}{100} \text{ kg} = \dots\dots \text{ kg}.$$

- (A) 0.06 (B) 0.6 (C) 0.006 (D) 0.0006

Question 2. Choose the correct answer.

In 721.986, in which place is the 7?

- (A) hundredths (B) tenths (C) hundreds (D) tens

Question 3. Choose the correct answer.

Which sign makes the sentence true?

$$0.346 \dots\dots 0.3460.$$

- (A) < (B) = (C) > (D) +

Question 4. Choose the correct answer.

Fill in the blank with the correct number:

$$4 \text{ ton } 217 \text{ kg} = \dots\dots \text{ ton}.$$

- (A) 4.0217 (B) 4.217 (C) 42.17 (D) 421.7

Question 5. Choose the correct answer.

Write $3\frac{27}{10000}$ as a decimal number.

- (A) 3.27 (B) 3.027 (C) 3.0027 (D) 3.00027

Question 6. Choose the correct answer.

Which of the following decimal numbers is equal to 3.9800?

- (A) 3.908 (B) 3.0098 (C) 3.098 (D) 3.98

Question 7. Choose the correct answer.

Write 0.15 as a fraction in simplest form.

(A) $\frac{15}{100}$

(B) $\frac{3}{20}$

(C) $\frac{15}{10}$

(D) $\frac{3}{2}$

Question 8. Choose the correct answer.

Find a if a is 3 times of b; b is $\frac{1}{4}$ of c and $c = \frac{3}{5}$.

(A) 0.9

(B) 0.45

(C) 0.18

(D) 0.75

Question 9. Choose the correct answer.

Find the greatest value of x if it is a natural number and $x < 9.745$.

(A) 9

(B) 8

(C) 7

(D) 10

Question 10. Choose the correct answer.

Find x if $\overline{ab3.738} < \overline{ab3.7x4} < \overline{ab3.753}$.

(A) 3

(B) 4

(C) 5

(D) 6

EXAM 2 Kid Champion

Let's reach the intellectual peak by answering the questions below.



Question 1. In 376.258 which digit is in the hundredths place?

Answer: The digit in the hundredths place is

Question 2. Convert 4 ton 15kg to ton.

Answer: 4 ton 15kg =ton.

Question 3. Find the next decimal number in the sequence:

21.2 ; 23.5 ; 25.8 ; 27.11 ;

Answer: The next decimal number in this sequence is

Question 4. Compare: 2m 3cm and 2.3m.

Answer: 2m 3cm 2.3m.

Question 5. Calculate: $a + b$ if $a = 3.15$ and $b = 8.26$.

Answer: $a + b = \dots\dots$

Question 6. Write $4\frac{53}{100}$ as a decimal number.

Answer: The result is

Question 7. Calculate: $27.765 - 13.64 + 8.123$.

Answer: The result is

Question 8. Find a, b if they are two consecutive natural numbers and $a < 23.4535 < b$.

Answer: The value of a is

The value of b is

Question 9. Find a decimal number if it is decreased by 2.7, the result is increased by 3.5 then the last result is 7.5.

Answer: This number is

Question 10. Find the greatest value of m if m is a natural number and $3.72 + m < 12.36$.

Answer: The greatest value of m is

● EXAM 3 > Grid Ins

Fill in the blanks with the correct answers to answer 10 questions below.



Question 1. In 718.3452 which digit is in the tens place?

Answer: The digit in the tens place is

Question 2. Compare: 0.34 and $\frac{340}{1000}$.

Answer: 0.34 $\frac{340}{1000}$.

Question 3. Which of the following decimal numbers is the greatest?

6.04 ; 5.36 ; 3.89 ; 7.02 ; 4.75.

Answer: The greatest decimal number is

Question 4. Fill in the blank with the correct decimal number:

7kg 25g =kg.

Answer: The correct decimal number is

Question 5. Compare: $A = 3.45 + 2.4 + 7.64$ and $B = 4.43 + 1.7 + 7.32$.

Answer: A B.

Question 6. Find x if $x + 14.63 = 27.721$.

Answer: The value of x is

Question 7. The area of a rectangle is 7232cm^2 . The area of a circle is 5346cm^2 .

Calculate the sum of area of this rectangle and this circle.

Answer: The sum of area of the circle and the rectangle is dm^2 .

Question 8. Compare: $A = \overline{1.b5} + \overline{a.23} + \overline{4.61c}$ and $B = \overline{a.b0c} + \overline{5.79}$.

Answer: A B.

Question 9. How many natural numbers n such that $n < 7.25 < n + 3$?

Answer: There are numbers.

Question 10. Find a, b if they are two consecutive even numbers and $a + 1 < 11.6443 < b$.

Answer: The value of a is

The value of b is

ROUND 5

TEST 1

EXAM 1 Treasure Hunting

Let's help the miner to go through the maze by answering 10 questions to reach the destination.



Question 1. Calculate: $87.23 - 25.76 = \dots\dots$

Choose the correct number to fill in the blank.

- A** 61.47 **B** 60.47 **C** 61.57 **D** 60.57

Question 2. If $x + 5.42 = 13.76$ then $x = \dots\dots$

Choose the correct number to fill in the blank.

- A** 8.24 **B** 8.34 **C** 7.43 **D** 8.43

Question 3. If $a = 1.25$ and $b = 7$ then $a \times b = \dots\dots$

Choose the correct number to fill in the blank.

- A** 8.85 **B** 8.65 **C** 8.175 **D** 8.75

Question 4. Calculate: $4.25 \times 2.5 = \dots\dots$

Choose the correct number to fill in the blank.

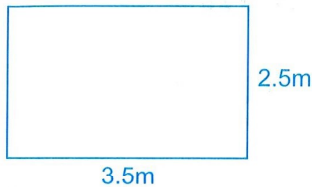
- A** 11.625 **B** 106.25 **C** 10.625 **D** 116.25

Question 5. A milk factory produced 589.5 liters of milk in 6 hours. How much milk, on average, did the factory produce per hour?

Choose the correct answer:

- A** 98.125 liters **B** 98.25 liters
C 97.25 liters **D** 97.125 liters

Question 6. The area of the following rectangle is:



- (A) 7.75m^2 (B) 9.75m^2 (C) 8.25m^2 (D) 8.75m^2

Question 7. Find two decimal numbers if their sum is 30.3 and their difference is 3.1.

Answer: Two numbers are:

- (A) 17.8 and 12.5 (B) 16.3 and 14
(C) 16.7 and 13.6 (D) 17.6 and 12.7

Question 8. The sum of two decimal numbers is 20.1. If the first number is increased by 5 times and the second number is unchanged then new sum will equal 70.5.

The first number is

- (A) 12.6 (B) 7.5 (C) 8.5 (D) 11.6

Question 9. The difference of two decimal numbers is 2.85. If the greater number is increased by 3 times and the less number is unchanged then the new difference will equal 17.31.

The greater number is

- (A) 5.38 (B) 8.23 (C) 7.23 (D) 4.38

Question 10.



The missing number in the is

- (A) 7.93 (B) 9.74 (C) 8.93 (D) 10.24

● EXAM 2 Grid Ins

Fill in the blanks with the correct answers to answer 10 questions below.



Question 1. $23.75 + \dots = 58.123$.

The missing number is

Question 2. Find x if $3 \times x = 38.1$.

Answer: The value of x is

Question 3. Calculate: $3.7 \times 9.2 - 12.5 : 2$.

Answer: The result is

Question 4. Find x if $x : 4.35 = 6.3$.

Answer: The value of x is

Question 5. $12.5 \times 5 + \dots \times 4 = 73.3$.

The missing number is

Question 6. Compare: $A = 2.175 \times 5$ and $B = 10 + 0.8 + 0.071 + 0.005$.

Answer: A B.

Question 7. If $x = y : 2$; $y = z : 3$ and $z + 14.68 = 40.48$ then the value of x is

Question 8. Find a if $1.01 \times \overline{ab} = \overline{8b.4a}$.

Answer: The value of a is

Question 9. John's weight is 67.5 pounds and Sarah's weight is 26.5 pounds. If both John and Sarah lose x pounds weight then Sarah's weight will be

equal to $\frac{1}{3}$ of John's weight. The value of x is

Question 10. The area of a rectangle is 30.6cm^2 . If its length is increased by 3cm and its width is unchanged then its area will equal 41.4cm^2 . Find its width.

Answer: The width of the rectangle iscm.

EXAM 3 Arrangement

Arrange numbers or calculations in order from least to greatest then fill their sequence numbers in below.



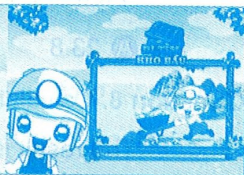
9.01 1	$32.1 : 3$ 2	5.2×2 3	4.06 4
0.109×100 5	3.07 6	$5.6 + 4.5$ 7	2×5.3 8
6.04 9	The least 2 - digit natural number which has two digits the same 10	7.03 11	1.09 12
$25.6 - 15.3$ 13	8.02 14	1.08×10 15	10 16
2.08 17	2.1×5 18	5.05 19	$10\frac{1}{5}$ 20

The correct order is:

TEST 2

EXAM 1 Treasure Hunting

Let's help the miner to go through the maze by answering 10 questions to reach the destination.



Question 1. Calculate: 12.3×4 .

Choose the correct answer.

- (A) 48.2 (B) 49.2 (C) 49.02 (D) 48.02

Question 2. Find x if $x = 0.00003 \times 10$.

Answer: The value of x is

- (A) 0.00003 (B) 0.0003 (C) 0.0030 (D) 0.03

Question 3. Find the value of $x + 2$ if $23.4 \times 0.2 = x$.

Answer: The value of $x + 2$ is

- (A) 6.68 (B) 4.48 (C) 4.68 (D) 6.48

Question 4. Calculate: 7.429×100 .

Answer: The result is

- (A) 7.429 (B) 74.29 (C) 742.9 (D) 7429

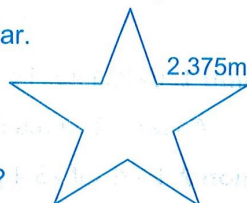
Question 5. Fill in the blank with the correct number:

$$5 \times \dots = 13.75.$$

Answer: The correct number is

- (A) 2.55 (B) 3.75 (C) 3.25 (D) 2.75

Question 6. Calculate the perimeter of the following star.



Which of the following answers is not correct?

- (A) 2375cm (B) 23.75m (C) 23m 75dm (D) 23m 75cm

Question 7. If the sum of two decimal numbers is 27.2 and the greater number is seven times of the less number then the greater number is

Choose the correct answer.

- A** 23.8 **B** 25.2 **C** 3.4 **D** 4.4

Question 8. Calculate: $1.1 + 1.2 + 1.3 + \dots + 9.8$.

The result is

- A** 245.25 **B** 959.2 **C** 490.5 **D** 479.6

Question 9. The sum of two decimal numbers is 14.04. If the first number is increased by 5 times and the second number is increased by 2 times then the new sum will equal 35.1.

The first number is

- A** 11.7 **B** 2.34 **C** 3.24 **D** 10.8

Question 10. How many decimal numbers are there between 17 and 18 such that have one digit in fraction part?

Answer: There are

- A** 11 numbers **B** 8 numbers
C 9 numbers **D** 10 numbers

EXAM 2 Grid Ins

Fill in the blanks with the correct answers to answer 10 questions below.



Question 1. Calculate: 19.7×6 .

Answer: The result is

Question 2. Find x if $23.4 : x = 3$.

Answer: The value of x is

Question 3. Mrs. Emily used 0.93kg of flour to make a cake. How much flour did she use to make 100 such cakes?

Answer: She usedkg of flour to make 100 such cakes.

Question 4. If $x : y = 3.4$ and $y \times 4 = 9.2$ then $x + y =$

Question 5. 1 kg of apples costs \$4.35 and 1 kg of grapes costs \$7.2. How much does Mrs. Marie have to pay for 2 kg of grapes and 3 kg of apples?

Answer: She has to pay \$.....

Question 6. Jane had \$40. She bought 5kg of mangoes at \$4.55 per kilogram. How much money did she have left?

Answer: She had \$..... left.

Question 7. Fill in the blank with the correct number:

$$23.4 \times 3 - \dots \times 10 = 15.6$$

Answer: The correct number is

Question 8. Find b if $1.001 \times \overline{abc} = \overline{a5c.2b9}$.

Answer: The value of b is

Question 9. The area of a rectangle is 24.7m^2 . If its length is decreased by 5 times and its width is increased by 6 times then its area will equal m^2 .

Question 10. Find the next decimal number in this sequence:

1.5 ; 4.5 ; 13.5 ; 40.5 ;

Answer: The next decimal number in the sequence is

EXAM 3 Arrangement

Arrange numbers or calculations in order from least to greatest then fill their sequence numbers in below.



8.4×9 1	$7.6 + 3.5$ 2	$0.8 \times 6 + 7.2$ 3	$15.7 + 9.12 - 12.92$ 4
The greatest 2-digit natural number which has two digits the same 5	$5.3 \times 3 + 15.3$ 6	2.9×4 7	$5723\text{cm} = \dots\text{m}$ The missing number in the blank 8
5.7×2 9	$4.5 \times 7 + 15.4 \times 2$ 10	$24.1 \times 4 - 8.4 \times 3$ 11	$13.6 - 2.3$ 12
$15.1 \times 4 + 83.4 : 3$ 13	$34.5 : 3$ 14	10.1×9 15	$24.4 - 4.7 - 7.9$ 16
$16.4 - 5.2$ 17	$90.09 : 3 + 10.01$ 18	3.9×3 19	$3.1 \times 9 - 5.8$ 20

The correct order is:

ROUND 6

TEST 1

EXAM 1 Matching

Choose pairs of numbers or calculations have the same value in the following table's cells then fill their sequence number in below.



1%+3%+5%+... +99%	4.5	9 : 4	8 : 2.5
19 : 8	The value of x + 2 if $x \times 12 = 27$	7 : 5	24 : 2.5
21% + 23%	1.4	25 : 111.11 × 111.11	1.25
3.25 : 2.6	19% + 25%	12.15 : 2.7	34 : 8
19.78 : 2.3 + 1	The value of x if $x \times 12 = 27$	3.2	2.375

Answer: Pairs of numbers or calculations have the same value are:

and ; and ; and ; and

and ; and ; and ; and

and ; and

EXAM 2 Jump Over

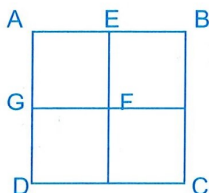
You have to drive your car passing 10 obstacles to finish. In order to overcome each obstacle, you have to answer correctly one question in that obstacle. Are you ready?



Question 1. Choose the correct answer.

Look at the following figure.

Find the area of the square AEFG if the area of the square ABCD is 15cm^2 .



Answer: The area of the square AEFG is

- (A) 4cm^2 (B) 3.75cm^2 (C) 5cm^2 (D) 1.5cm^2

Question 2. Choose the correct answer.

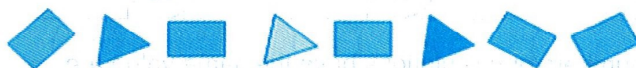
Find x if $x \times 5 = 17$.

Answer: The value of x is:

- (A) 3.2 (B) 5.4 (C) 2.4 (D) 3.4

Question 3. Choose the correct answer.

The percentage of the number of triangles to the number of rectangles in the following figure is:



- (A) 60% (B) 37.5% (C) 45.5% (D) 75%

Question 4. Choose the correct answer.

The value of $15.98 : 4.7$ is

- (A) 3.7 (B) 3.4 (C) 5.4 (D) 5.7

Question 5. A chocolate factory made 865 pounds of milk chocolate in 4 days.
How much milk chocolate, on average, did the factory make per day?
Choose the correct answer.

- (A) 125.26 pounds (B) 216.52 pounds
(C) 215.26 pounds (D) 216.25 pounds

Question 6. Fill in the blank with the correct number.

Each letter A ; B ; C ; D ; E ; F represents a single digit number.

Such that: $A:B = \overline{C.D}$

$D:B = \overline{E.F}$.

If $A = 7$ and $B = 5$ then the value of F is

Question 7. Choose the correct answer.

Jane bought 12m of the lace. She cut it equally into 8 pieces. The length of each piece is:



- (A) 1m (B) 2m (C) 1.5m (D) 2.5m

Question 8. Fill in the blank with the correct number.



Which number should replace the question mark?

Answer: The number that should replace the question mark is

Question 9. Fill in the blank with the correct answer.

The percentage of girl students in a class is 48%. There are 26 boy students in this class. How many students are there in the class?

Answer: There are students.

Question 10. Choose the correct answer.

What is the percentage of change from 20 to 25?

- (A) 20% increase (B) 20% decrease
(C) 25% increase (D) 25% decrease

EXAM 3 Grid Ins

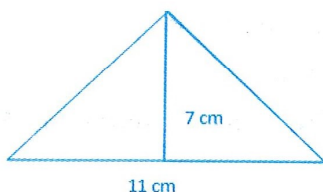
Fill in the blanks with the correct answers to answer 10 questions below.



Question 1. Write 90% as a decimal number.

The result is

Question 2. The area of the following triangle is cm^2 .



Question 3. Find x if $x \times 2.5 = 9.75$.

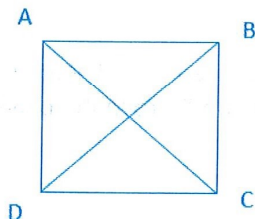
Answer: The value of x is

Question 4. If $A @ B = (A - B) : 6$ then $37 @ 16 = \dots\dots$

Question 5. Find x if $x\%$ of 152 is 114.

Answer: The value of x is

Question 6. Look at the following figure.



If the area of triangle ADC is 15dm^2 then 27% of area of the square ABCD is dm^2 .

Question 7. 0.4% of 250 is

Question 8. If $8 \times x = 20$ then the value of $x : 5$ is

Question 9. Three shapes below are each given a value. Each value is a decimal number or whole number such that:

$$\diamond + \star = 5.5 ; \quad \star - \diamond = 13.5 ; \quad \star \times 2 = 8$$

Calculate: $\star : \star : \diamond$

Answer: The result is

Question 10. Find B if 16% of B is 20.

Answer: $B = \dots\dots$

TEST 2

EXAM 1 Matching

Choose pairs of numbers or calculations have the same value in the following table's cells then fill their sequence number in below.



54% - 25% 	7.54 	15.05 + 3.67 	20% of the least 2 - digit number
2 : 80 	7.436 + 6.8 	51% - 22% 	4.48 + 3.06
7.436 - 6.8 	15.05 - 3.67 	5.5 : 2.5 - 0.2 	20% of 20% of 20% of 1
0.036 : 4,5 	20% of the greatest 2-digit number 	2.356 - 3.44 : 2 	41 : 2.5 + 3.4
3.7 + 2.56 × 3 	18.72 	25% of 20% of 25% of 2 	14.236

Answer: Pairs of numbers or calculations have the same value are:

and ; and ; and ; and

and ; and ; and ; and

and ; and

EXAM 2**Jump Over**

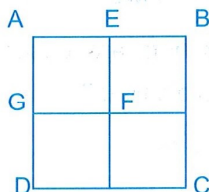
You have to drive your car passing 10 obstacles to finish. In order to overcome each obstacle, you have to answer correctly one question in that obstacle. Are you ready?



Question 1. Choose the correct answer.

Look at the following figure.

Find the area of the square AEFG if the area of the square ABCD is 27cm^2 .



Answer: The area of the square AEFG is

- A** 6.75cm^2 **B** 3.75cm^2 **C** 5.75cm^2 **D** 4.75cm^2

Question 2. Choose the correct answer.

Find x if $x \times 4 = 35$.

Answer: The value of x is:

- A** 7.5 **B** 6.75 **C** 8.5 **D** 8.75

Question 3. Choose the correct answer.

Which of the following calculations has the least result?

- A** $14.95 : 6.5$ **B** $12 : 5$ **C** $15 : 6$ **D** $9.62 : 3.7$

Answer: The calculation that has the least result is

Question 4. Choose the correct answer.

Look at these numbers.

0.15 0.9 0.5 0.3 0.09

Two numbers in the box which have a product of 0.45 are:

- A** 0.5 and 0.09 **B** 0.9 and 0.5 **C** 0.15 and 0.03 **D** 0.15 and 0.3

Question 5. Fill in the blank with the correct number.

5 kg of sugar cost \$4.75. Mary bought 6 kg of sugar and she had \$10.3 left. How much money did she have at first?

Answer: She had \$..... at first.

Question 6. Choose the correct answer.

If $A\# = A : 5$ and $B\$ = 2.4 \times B$ then $29\#\#\$ =$

A 2.784

B 2.924

C 4.278

D 2.942

Question 7. Fill in the blank with the correct answer.

At Leslie's Hats, 25% of the 48 hats are baseball caps. How many baseball caps are there in the Leslie's Hats?

Answer: There are baseball caps.

Question 8. Choose the correct answer.

Which is the least?

A 25% of $\frac{4}{7}$

B 25% of $\frac{4}{5}$

C 25% of $\frac{5}{8}$

D 25% of $\frac{5}{6}$

Question 9. Fill in the blank with the correct answer.

The percentage of girl students in a class is 46%. There are 27 boy students in this class. How many students are there in the class?

Answer: There are students.

Question 10. Choose the correct answer.

What is the percentage of change from 25 to 20?

A 20% increase

B 20% decrease

C 25% increase

D 25% decrease

EXAM 3 Grid Ins

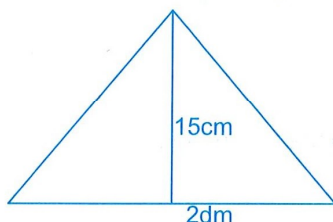
Fill in the blanks with the correct answers to answer 10 questions below.



Question 1. Write 75.6% as a decimal number.

The result is

Question 2. The area of the following triangle is cm^2 .



Question 3. Find x if $9.375 : x = 2.5$.

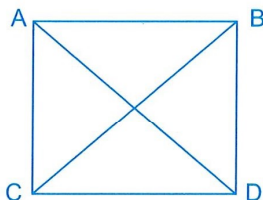
Answer: The value of x is

Question 4. If $A \div B = A - B : 6$ then $39 \div 15 = \dots\dots$

Question 5. Find x if $x\%$ of 125 is 85.

Answer: The value of x is

Question 6. Look at the following figure.

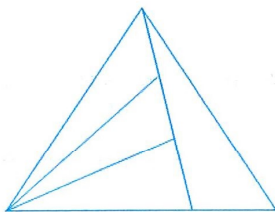


If the area of triangle ADC is 15dm^2 then 35% of area of the square ABCD is dm^2 .

Question 7. 0.4% of 500 is

Question 8. If $8 \times x = 20$ then the value of $x : 4$ is

Question 9. How many triangles are there in the following figure?



Answer: There are triangles.

Question 10. Each letter in the alphabet represent a single digit value such that:

$$\begin{array}{r} \text{ICE} \\ + \text{CREAM} \\ \hline \text{CAKES} \end{array}$$

If $A = 3$; $I = 9$; $S = 8$ then the value of R is

ROUND 7

TEST 1

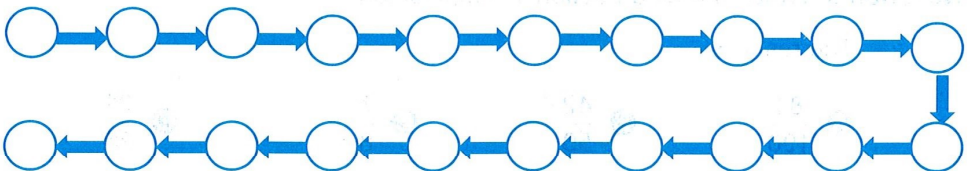
EXAM 1 Arrangement

Arrange numbers or calculations in order from least to greatest then fill their sequence numbers in below.



$\frac{1}{5} - \frac{1}{20}$ 	$1 - 0.3$ 	$\frac{1}{35} + \frac{1}{70}$ 	$102.6 - 101.6$
$0.01 + 0.03 + 0.05 + \dots + 0.59$ 	$\frac{3}{20} : 3$ 	$0.1 + 0.4$ 	$\frac{1}{10} : \frac{4}{3}$
$\frac{1}{30} + \frac{1}{15}$ 	$\frac{3}{100}$ 	$\frac{9}{10}$ 	$\frac{1}{5} + \frac{1}{10}$
0.8×4 	$0.2 + 0.2$ 	$\frac{3}{10} \times \frac{1}{9}$ 	$2.7 - 1.9$
$\frac{1}{20} \times \frac{3}{4}$ 	$1.34 + 0.66$ 	$\frac{1}{5} \times \frac{3}{2} \times \frac{1}{5}$ 	0.2×3

The correct order is:



EXAM 2 Golden Frog

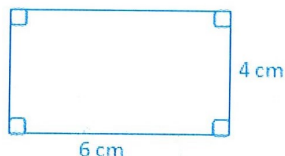
Choose the correct answer in 4 available answers.



Question 1. The value of the digit 4 in 3421.78 is

- (A) 40 (B) 4 (C) 0.04 (D) 400

Question 2. The figure shows a rectangle. The ratio of its length to its perimeter is



- (A) 3 : 2 (B) 3 : 10 (C) 6 : 10 (D) 6 : 4

Question 3. What fraction of cakes are either square or triangle ?



Choose the correct answer.

- (A) $\frac{1}{7}$ (B) $\frac{4}{7}$ (C) $\frac{3}{7}$ (D) $\frac{2}{7}$

Question 4. Find x if $\frac{3}{5} \times x = \frac{7}{20}$.

Answer: The value of x is

- (A) $\frac{7}{12}$ (B) $\frac{21}{100}$ (C) $\frac{35}{20}$ (D) $\frac{7}{4}$

Question 5. Write 84% as a fraction in simplest form.

The result is

- (A) $\frac{84}{100}$ (B) $\frac{42}{50}$ (C) $\frac{7}{8}$ (D) $\frac{21}{25}$

Question 6. Find x if $7.2386 < \overline{7.23x2}$.

Answer: $x = \dots\dots$

A 6

B 9

C 8

D 7

Question 7. Who did wrong?



$$2.5 \times 7.4 + 12.8 = 31.3$$



$$3.6 : 2 - 0.75 = 1.05$$



$$1.3 \times 3.2 + 4.51 = 37.09$$



$$2 : 2 + 3.7 = 4.7$$

A



B



C



D



Question 8. Mrs. Jane had 64 kg of potatoes. She sold 40% of it at \$2 per kilogram.

She collected

A \$51.2

B \$62.5

C \$32

D \$102.4

Question 9. A bookstore has 200 magazines for men or women. 53% of the magazines are women's magazines. How many men's magazines does the bookstore have?

Answer: There are

A 53 magazines

B 94 magazines

C 106 magazines

D 47 magazines

Question 10. The value of $\frac{2}{1 \times 3} + \frac{2}{3 \times 5} + \frac{2}{5 \times 7} + \dots\dots + \frac{2}{77 \times 79}$ is

A $\frac{6081}{6083}$

B $\frac{74}{231}$

C $\frac{78}{79}$

D $\frac{156}{79}$

EXAM 3 Grid Ins

Fill in the blanks with the correct answers to answer 10 questions below.



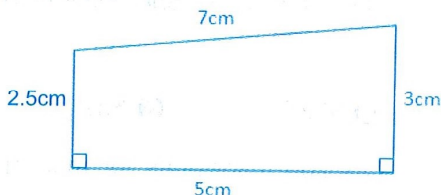
Question 1. Find X if $\frac{3}{7} = \frac{X}{133}$.

Answer: The value of X is

Question 2. $\frac{2}{5}$ of the books in a library are comic books. What percentage of the books in the library are comic books?

Answer: The percentage of the comic books to all the books in the library is%.

Question 3. The area of the following figure isdm².



Question 4. Anna is 12 years old. Her father is $3\frac{1}{4}$ as old as she. How old is Anna's father?

Answer: Anna's father is years old.

Question 5. A school has 27 classes. There are 40 students in each class. If there are 481 girls altogether, how many more boys than girls are there in the school?

Answer: There are students.

Question 6. 35% of 2m 5cm isdm.

Question 7. There were $4\frac{1}{10}$ cakes on the tables. Peter ate $1\frac{1}{2}$ cakes and Jack ate $2\frac{1}{5}$ cakes. How many cakes were left over?

(Write your answer as a decimal number.)

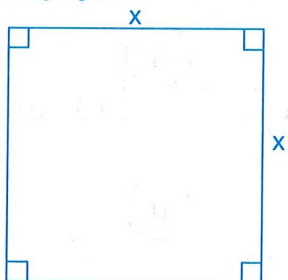
Answer: of cakes were left over.

Question 8. If x is a natural number and $x < 8.2334$ then the greatest value of x is

Question 9. Susan is 12 years old. Her mother is 75% as old as the sum of her age and her mother's age. How old is Susan's mother?

Answer: Susan's mother is years old.

Question 10. Look at the following figure.



If x is increased by 20% then the area of the square will be increased by %.

TEST 2

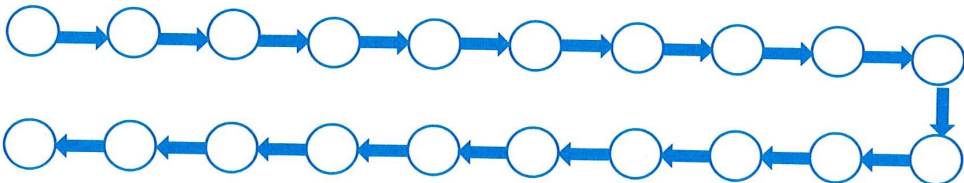
EXAM 1 Arrangement

Arrange numbers or calculations in order from least to greatest then fill their sequence numbers in ☐ below.



25% of 16 ☐ 1	$\frac{1}{5} - \frac{1}{20}$ ☐ 2	$0.2 + 0.3$ ☐ 3	$\frac{1}{5} + \frac{1}{10}$ ☐ 4
$\frac{3}{15} : 4$ ☐ 5	$0.01 + 0.02 + 0.03 + \dots + 0.55$ ☐ 6	$\frac{1}{10} \times \frac{2}{9}$ ☐ 7	The value of x if 30% of x is 3 ☐ 8
$0.1 + 0.3$ ☐ 9	$\frac{1}{2} \times \frac{3}{5} \times \frac{1}{5}$ ☐ 10	$1.2 - 0.5$ ☐ 11	$\frac{1}{20} \times \frac{2}{4}$ ☐ 12
$\frac{1}{2} - \frac{3}{15} - \frac{1}{5}$ ☐ 13	20% of 25 ☐ 14	$\frac{1}{35} + \frac{1}{70}$ ☐ 15	$2.95 + 0.05$ ☐ 16
$2.8 - 2$ ☐ 17	$\frac{2}{100}$ ☐ 18	0.3×2 ☐ 19	$\frac{1}{8} : \frac{5}{3}$ ☐ 20

The correct order is:



EXAM 2 Golden Frog

Choose the correct answer in 4 available answers.



Question 1. The value of the digit 7 in 3421.78 is

- ☐ A 7
 ☐ B 70
 ☐ C 0.7
 ☐ D 700

Question 2. Which of the following fractions is smaller than $\frac{1}{3}$?

- ☐ A $\frac{5}{12}$
 ☐ B $\frac{8}{21}$
 ☐ C $\frac{10}{27}$
 ☐ D $\frac{5}{28}$

Question 3. The following table shows the length of four wires.

1 st wire	2 nd wire	3 rd wire	4 th wire
			
9m 5dm	9.5m	905cm	95dm

Which of these wires is the shortest one?

Answer: The shortest wire is

- ☐ A 1st wire
 ☐ B 2nd wire
☐ C 3rd wire
 ☐ D 4th wire

Question 4. Write $7\frac{1}{2}$ as a decimal number.

The result is

- ☐ A 7.1
 ☐ B 7.2
 ☐ C 7.4
 ☐ D 7.5

Question 5. Find the smallest natural number that the sum of its digits is 14.

Answer: This number is

- ☐ A 102344
 ☐ B 149
 ☐ C 59
 ☐ D 14

Question 6. Find two numbers if their quotient is 0.8 and their difference is 0.26.

Answer: Two numbers are

A 1.04 and 1.3

B 2.08 and 1.82

C 2.6 and 2.34

D 1.3 and 1.56

Question 7. Which of the following calculations equals 9.22?

A $3.97 + 6.25$

B $12.96 : 3 + 4.9$

C $36.88 : 4 - 1$

D $4.61 \times 1.5 + 0.5$

Question 8. The next letter or number in this logic sequence:

1; Z; 3; W; 9; T; 27; Q; 81; is

A R

B 84

C N

D 243

Question 9. The sum of two consecutive odd numbers is 604.

The greater number is

A 209

B 301

C 303

D 307

Question 10. How many 3 - digit numbers are divisible by 3?

Answer: There are

A 299 numbers

B 300 numbers

C 899 numbers

D 900 numbers

EXAM 3

Grid Ins

Fill in the blanks with the correct answers to answer 10 questions below.



Question 1. $\frac{72}{100} = \text{.....}\%$

Question 2. Convert: 7m 5cm =cm.

Question 3. Calculate: $2.5 \times 3 + 7.35$.

The result is

Question 4. The value of 2 in 12.0935 is

Question 5. If $\overline{ab} \times 1.01 = \overline{a5.6b}$ then $a + b = \dots\dots$

Question 6. Each letter A or B represent a single digit number such that:

AB

+AB

AB

16B

Find B.

Answer: The value of B is

Question 7. Peter, Jack and Tom shared 176 marbles in the ratio 4 : 8 : 10. How many more marbles did Tom receive than Peter?

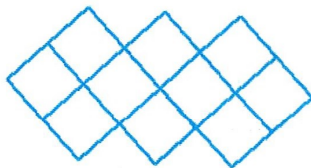
Answer: There are marbles.

Question 8. 29% of x is 377. The value of x is

Question 9. Find x if $(x+1) + (x+6) + (x+11) + \dots + (x+96) = 990$.

Answer: $x = \dots\dots$

Question 10. How many squares are there in the following figure?



Answer: There are squares.

ROUND 8

TEST 1

EXAM 1 Treasure Hunting

Let's help the miner to go through the maze by answering 10 questions to reach the destination.



Question 1. Fill in the blank with the correct number.

Calculate: $8.1 + 4.5 + 3.9 + 2.5$.

The result is

Question 2. Fill in the blank with the correct number.

12% of what is 36?

Answer: 12% of is 36.

Question 3. Fill in the blank with the correct number.

The difference between 49.8km and 93.7km ism.

Question 4. Choose the correct answer.

Write the following fractions in order from least to greatest.

$\frac{2}{5}$	$\frac{9}{8}$	$\frac{1}{3}$	$\frac{2}{3}$
---------------	---------------	---------------	---------------

Answer: The correct order is

A $\frac{2}{5}, \frac{1}{3}, \frac{2}{3}, \frac{9}{8}$

B $\frac{9}{8}, \frac{2}{3}, \frac{2}{5}, \frac{1}{3}$

C $\frac{1}{3}, \frac{2}{5}, \frac{2}{3}, \frac{9}{8}$

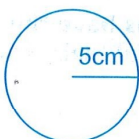
D $\frac{1}{3}, \frac{2}{3}, \frac{2}{5}, \frac{9}{8}$

Question 5. Fill in the blank with the correct number.

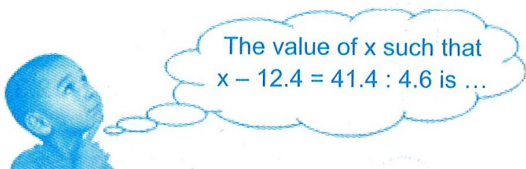
If x is a natural number and $0.5 \times x > 8.7$ then the least value of x is

Question 6. Fill in the blank with the correct number.

The area of the following circle is dm^2 .



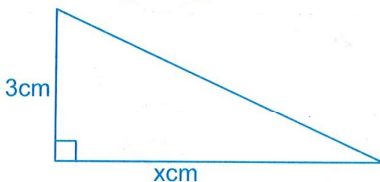
Question 7. Fill in the blank with the correct number.



Answer: The value of x such that $x - 12.4 = 41.4 : 4.6$ is

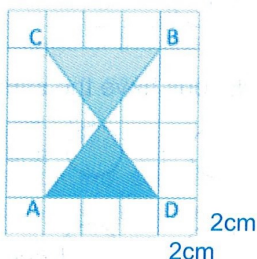
Question 8. Fill in the blank with the correct number.

Find x if the area of the following triangle is 9.75cm^2 .



Answer: $x = \dots\dots$

Question 9. The area of the shaded figure is cm^2 .



Question 10. How many 3 - digit numbers not divisible by 3?

Answer: There are numbers.

EXAM 2 Matching

Choose pairs of numbers or calculations have the same value in the following table's cells then fill their sequence number in ☐ below.



60% of 80 ☐ 1	$12.5 \times (6.3 + 3.7)$ ☐ 2	The value of x if $39,6m^2 = xdm^2$ ☐ 3	$\frac{5}{7} \div \frac{9}{7}$ ☐ 4
$\frac{5}{7} \times \frac{9}{7}$ ☐ 5	$12.5 \times (6.3 - 3.7)$ ☐ 6	$\frac{3}{7}$ ☐ 7	$4.2 \times 2.3 + 18.34$ ☐ 8
8% of 60 ☐ 9	125 ☐ 10	40% of 120 ☐ 11	$\frac{13}{5}$ ☐ 12
$\frac{27}{63}$ ☐ 13	$24 : 5$ ☐ 14	$\frac{5}{9}$ ☐ 15	The sum of all 2 - digit numbers not divisible by 5 ☐ 16
0.28×100 ☐ 17	2.6 ☐ 18	$1 - \frac{4}{49}$ ☐ 19	$12.5 \times 6.3 - 12.5 \times 3.7$ ☐ 20

Answer: Pairs of numbers or calculations have the same value are:

☐ and ☐ ; ☐ and ☐ ; ☐ and ☐ ; ☐ and ☐

☐ and ☐ ; ☐ and ☐ ; ☐ and ☐ ; ☐ and ☐

☐ and ☐ ; ☐ and ☐

EXAM 3 Grid Ins

Fill in the blanks with the correct answers to answer 10 questions below.



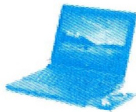
Question 1. Calculate: $2.3\text{m} + 6.8\text{m} = \dots\dots\text{dm}$.

The result is

Question 2. How much are the iPhone and the printer altogether?



\$799



\$685



\$165



\$750

Answer: The iPhone and the printer cost \$..... altogether.

Question 3. If $a = 3.5$ and $b = 8.89$ then $b : a = \dots\dots$

Question 4. Find all x such that $2.91 < x < 11.34$ and x is a even number.

(Write numbers in order from least to greatest and use “;”)

Answer: $x = \dots\dots$

Question 5. In the following figure, what percentage is the shaded part?

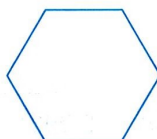


Answer: The percentage of the shaded part is%.

Question 6. Find x such that $(x + 2.35) - 4.67 = 14.68$.

Answer: The value of x is

Question 7. The perimeter of the star equals the perimeter of the regular hexagon. Each side of the hexagon is 16cm long. How long is each side of the star?

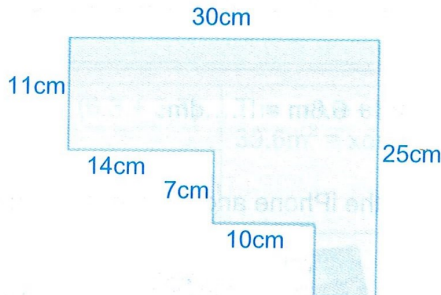


Answer: Each side of the star is ...cm long.

Question 8. Fill in the blank with the correct number.

$$2\text{m}^2 3\text{dm}^2 + 1\text{m}^2 35\text{cm}^2 = \dots\dots\text{cm}^2$$

Question 9. The area of the following figure is cm^2 .



Question 10. Fill in the blank with the correct number.

Tina works 17 hours a week (from Monday to Friday). Last week she worked 4.5 hours on Monday; 5 hours on Tuesday; 2.2 hours on Wednesday and 1.5 hours on Thursday. She worked minutes on Friday.

TEST 2

EXAM 1 Treasure Hunting

Let's help the miner to go through the maze by answering 10 questions to reach the destination.



Question 1. Fill in the blank with the correct number.

Calculate: $124.7 : 100 + 34.25$.

Answer: The result is

Question 2. Choose the correct answer.

Look at these numbers :

5.586 0.293 0.675 5.595

Two numbers in the box have a sum of 6.261 are:

(A) 5.595 and 0.675

(B) 5.586 and 0.675

(C) 5.586 and 0.293

(D) 5.595 and 0.293

Question 3. Which of the following numbers should replace the question mark?

$$15.41 - \text{?} = 12.06 + 0.7$$

(A) 4.05

(B) 5.04

(C) 2.56

(D) 2.65

Question 4. Choose the correct answer.

Andrea has $\frac{1}{4}$ of sack of rice. She divides the rice equally into 7 bags.

What fraction of the full sack of rice is in each bag?

Answer: The fraction of the full sack of rice in each bag is

(A) $\frac{11}{28}$

(B) $\frac{1}{28}$

(C) $\frac{1}{7}$

(D) $\frac{1}{4}$

Question 5. Fill in the blank with the correct number:

$$2700\text{g} = \text{.....kg.}$$

Question 6. Fill in the blank with the correct number:

$$27 \text{ is \% more than } 15.$$

Question 7. Find x if $x \times 0.34 = 2.38 \times 3.06$.

$$\text{Answer: } x = \text{.....}$$

Question 8. Fill in the blank with the correct number:

$$3.94\text{m} + 821\text{cm} = \text{.....cm.}$$

Question 9. Fill in the blank with the correct number.

Nick spent 25% of his money on a book and \$17 on a pair of shoes. If he had \$28 left then he spent \$..... on the book.

Question 10. Fill in the blank with the correct number.

A rope 1.5m long is cut into 2 pieces. The longer piece is 26cm longer than the shorter piece. The length of the shorter piece iscm.

EXAM 2 Matching

Choose pairs of numbers or calculations have the same value in the following table's cells then fill their sequence number in below.



$27.3 - (7.5 - 2.3)$ 	$39.95 - 2.6 - 23.25$ 	6.375×5 	$27.3 - 7.5 - 2.3$
1	2	3	4
$7.3 \times 3 + 3.4$ 	$107.4 : 6$ 	$19.8 + 2.3$ 	The value of x if $39\text{dm}6\text{cm} = \text{xcm}$
5	6	7	8
$9.29 + 2.5 + 3.17$ 	$15 : 8$ 	$3.125 \times 2 + 7.85$ 	The 333 rd number in the sequence: 5; 10; 15; 20;...
9	10	11	12
The sum of all 2 - digit numbers divisible by 3 	$6.5 \times 3 - 1.6$ 	$14.515 + 17.36$ 	$7.5 : 2$
13	14	15	16
$19.8 - 2.3$ 	$7.7 + 17.6$ 	$3 \times 11 \times 12$ 	$19.16 - 4.2$
17	18	19	20

Answer: Pairs of numbers or calculations have the same value are:

and ; and ; and ; and
 and ; and ; and ; and
 and ; and .

EXAM 3 Grid Ins

Fill in the blanks with the correct answers to answer 10 questions below.



Question 1. A roller skate costs 50 dollars. Mary receives a 10% discount. How much does she have to pay?

Answer: She has to pay \$.....

Question 2. Fill in the blank with the correct number:

$$2.25\text{dam}^2 \times 7 = \dots\dots\text{m}^2.$$

Question 3. Find x such that $x - 12.5 = 10.75 : 2.5$.

Answer: The value of x is

Question 4. Alex painted a fence. He completed $\frac{3}{5}$ of the work on Monday. On

Tuesday, he was tired and completed only $\frac{1}{4}$ of the fence. The last day,

on Wednesday, he painted $\frac{A}{B}$ of the fence. Find A if $B = 60$.

Answer: $A = \dots\dots$

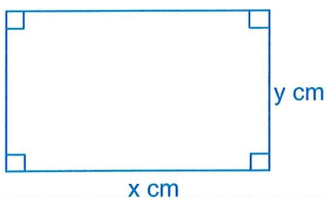
Question 5. Jane bought jelly beans. She gave $\frac{9}{11}$ of them for Jack. Jane kept 36 jelly beans. How many jelly beans did she buy altogether?

Answer: Jane bought jelly beans altogether.

Question 6. Fill in the blank with the correct number:

$$15\% \text{ of } 370\text{kg} = \dots\dots\text{g}.$$

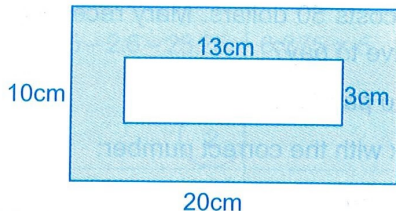
Question 7. The perimeter of this rectangle is 210cm and the ratio of x to y is $\frac{3}{4}$ then its area isdm².



Question 8. Mrs. Jane bought 2kg of grapes and 3kg of apples and had to pay \$14.92. Mrs. Anna bought 6kg of apples and 5kg of grapes and had to pay \$33.13. How much does one kilogram of grapes cost?

Answer: One kilogram of grapes cost \$.....

Question 9. The area of the shaded region iscm².



Question 10. Calculate:

$$2.73 + 4.23 + 5.73 + 7.23 + 8.73 + 10.23 + 11.73 + 13.23 + 14.73 \\ + 16.23 + 17.73.$$

The result is

ROUND 9

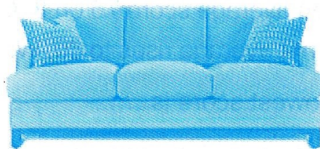
EXAM 1 Gird Ins

Fill in the blanks with the correct answers to answer 10 questions below.



Question 1. Jane buy a couch. A couch costs 950 dollars. She receives a 30% discount. How much money of the discount does she get?

Answer: She gets dollars discount.



Question 2. The perimeter of a circle is 21.98dm. Its area iscm².

Question 3. Fill in the blank with the correct number:

$$7.625\text{m}^3 = \text{.....cm}^3.$$

Question 4. Fill in the blank with the correct number:

$$\frac{76}{250}\text{dm}^3 = \text{.....cm}^3.$$

Question 5. The ratio of the number of girls to the number of boys in a classroom were 5 : 4. When 10 girls left the classroom, the ratio of the number of boys to the number of girls became 4 : 3. How many students were in the classroom at first?

Answer: There were students in the classroom at first.

Question 6. An aquarium is 7dm deep, 15dm long and 0.3m wide. What is the volume of the aquarium in cubic centimeters?

Answer: The volume of the aquarium iscm³.

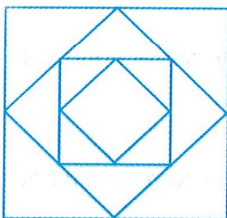


Question 7. The area of a rectangle is 70m². If its length is increased by 10% and its width is decreased by 20% then the area of the new rectangle ism².

Question 8. Anna has an average score 75 on 8 different tests. If the lowest score is removed then her average rises to 80. What is her lowest score?

Answer: Her lowest score is

Question 9. The sum of area of all squares in the following figure is 56250dm². The area of the smallest square iscm².



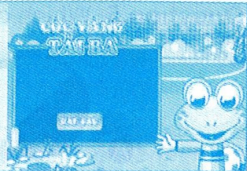
Question 10. At a party 60% of the boys are dancing with 90% of the girls. How many people are dancing if there are 50 people? (A pair includes only one boy and one girl).

Answer: There are ... people.



EXAM 2 Golden Frog

Choose the correct answer in 4 available answers.



Question 1. Which fraction is equal to 17.5%?

The correct answer is

A $\frac{175}{100}$

B $\frac{35}{20}$

C $\frac{7}{40}$

D $\frac{35}{50}$

Question 2. Mia want to buy apple. Which is the best buy?

A 7kg of apples for \$30.38

B 5kg of apples for \$21.5

C 6kg of apples for \$26.1

D 4kg of apples for \$17.32

Question 3. Peter counts his heart rate. He counts 8 beats per 6 seconds on average. How many beats per minute does Peter count?

Answer: Peter counts beats per minute.



A 80

B 75

C 60

D 140

Question 4. Choose the calculation that has the greatest result.

A $196.4 : 4 - 7.07$

B $59.8 : 2 + 26.13$

C $365.5 : 5 - 17.8$

D $125.7 : 3 + 14.3$

Question 5. Which of the following shapes is colored more than 50% ?



Question 6. If number A is increased by 60% then it will equal number B. How much percentage will B be decreased by to equal A?

Answer: B will be decreased by ...

- A** 60% **B** 37.5% **C** 62.5% **D** 40%

Question 7. The product: $20 \times 21 \times 22 \times \dots \times 40$ has digit 0.

Choose the correct number fill in the blank.

- A** 6 **B** 4 **C** 3 **D** 2

Question 8. How many fractions equal $\frac{1}{5}$ and have denominators of 2-digit numbers?

Answer: There are

- A** 16 numbers **B** 18 numbers
C 22 numbers **D** 20 numbers

Question 9. Calculate: $\frac{1}{6} + \frac{1}{12} + \frac{1}{24} + \dots + \frac{1}{768}$.

The result is:

- A** $\frac{255}{256}$ **B** $\frac{711}{768}$ **C** $\frac{85}{256}$ **D** $\frac{767}{768}$

Question 10. Find the smallest number that it is 7 times the sum of its digits?

Answer: The number is

- A** 14 **B** 28 **C** 42 **D** 21

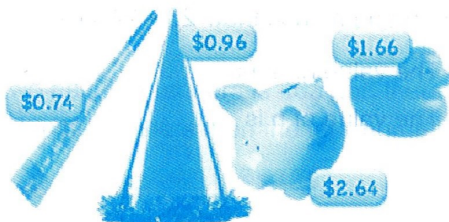
EXAM 3 Jump Over

You have to drive your car passing 10 obstacles to finish. In order to overcome each obstacle, you have to answer correctly one question in that obstacle. Are you ready?



Question 1. How much money would you need to buy the two most expensive toys?

Answer: \$.....



Question 2. Calculate: $5.5 \times (3.5 - 1.5) + 1.5$.

The result is

Question 3. Find x such that $x \times 8.6 - 5.2 \times x - 11.06 = 5.94$.

Question 4. Jim Smith drinks a magic potion that reduces his weight by half. He was 135kg before, so how heavy is he now?

Answer: He iskg now.

Question 5. Bill has \$40 in a saving account. The interest rate is 5% per month (interest on this month is not added to capital for the next month). How much will Bill have in one year (both capital and interest)?

Answer: He has \$..... in one year.

Question 6. Calculate: $\frac{1}{5} + \frac{7}{11} + \frac{5}{13} + 4 \times \left(\frac{1}{5} + \frac{1}{11} \right) + \frac{21}{13}$.

The result is

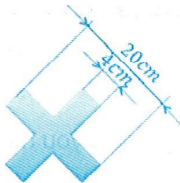
Question 7. Find the smallest sum of two numbers if their product is 100.

Answer: The sum is

Question 8. Find the smallest 6-digit number where only two digits are the same?

Answer: This number is

Question 9. The perimeter of the shape iscm.



Question 10. Find m and n such that: $23 \times 24 \times 15 \times 16 \times m = \overline{9n7360}$.

Answer: The value of m is

The value of n is

ROUND 10

EXAM 1 Golden Frog

Choose the correct answer in 4 available answers.



Question 1. 15% of 1080kg =g.

Choose the correct number fill in the blank.

(A) 162

(B) 7200

(C) 162000

(D) 7200000

Question 2. Calculate: $3.54 + 1.12 + 0.98 + 2.3$.

The result is

(A) 7.94

(B) 5.36

(C) 6.74

(D) 7.49

Question 3. Find the smallest number that the sum of its digits is 15.

Answer: This number is

(A) 159

(B) 69

(C) 168

(D) 177

Question 4. Find x such that $x \times 3 \frac{1}{15} - \frac{7}{9} = 2 \frac{1}{3}$.

The value of x is:

(A) $\frac{1288}{135}$

(B) $\frac{3864}{405}$

(C) $1 \frac{1}{69}$

(D) $1 \frac{1}{135}$

Question 5. Now, Peter's father is 36 years old and he is 11 years old. ... years ago, Peter's father was six times as old as him.

The missing number is:

(A) 3

(B) 4

(C) 5

(D) 6

Question 6. If the sum of two natural numbers is 463 and there are eighteen odd numbers between these numbers then the less number is:

(A) 213

(B) 123

(C) 435

(D) 453

Question 7. Find m if $\frac{1}{4} < \frac{m+2}{15} < \frac{17}{60}$.

Answer: $m = \dots\dots$

(A) 2

(B) 14

(C) 4

(D) 16

Question 8. Find y such that:

$$\left(\frac{1}{2 \times 4} + \frac{1}{4 \times 6} + \frac{1}{6 \times 8} + \dots + \frac{1}{98 \times 100} \right) : y = \frac{147}{50}.$$

Answer: The value of y is

(A) $\frac{1}{2}$

(B) $\frac{1}{3}$

(C) $\frac{1}{4}$

(D) $\frac{1}{12}$

Question 9. The surface area of a cube is 864cm^2 . The volume of this cube is

(A) 1258cm^2

(B) 4291cm^2

(C) 1728cm^2

(D) 3456cm^2

Question 10. Find the last digit of $A = 11 \times 21 \times 31 \times \dots \times 71 + 9 \times 19 \times 29 \times \dots \times 89$.

Answer: The last digit of A is

(A) 4

(B) 3

(C) 2

(D) 0

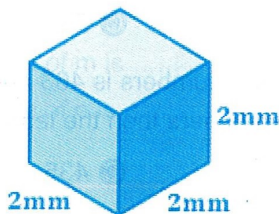
● EXAM 2 Grid Ins

Fill in the blanks with the correct answers to answer 10 questions below.



Question 1. If $\frac{144}{17} \times \frac{34}{12} < n < \frac{169}{34} : \frac{13}{68}$ and n is a natural number then $n = \dots\dots$

Question 2. What is the volume of this cube in cm^3 ?



Answer: The volume of this cube is $\dots\dots\text{cm}^3$.

Question 3. Find x if x is a natural number and $0.6 \times 7.5 < x < 3.5 \times 1.6$.

Answer: $x = \dots\dots$

Question 4. Fill in the blank with the correct number

$$34\text{m}^2 - 27\text{cm}^2 + 27\text{m}^2 - 20\text{dm}^2 = \dots\dots\text{dm}^2.$$

Question 5. Bella ate lunch at a restaurant. The total cost of her lunch is \$55. She left a 10% tip. What was her bill for lunch?

Answer: Bella's bill was \$.....

Question 6. How many 2-digit numbers have a sum of the digits equal 12?

Answer: There are $\dots\dots$ such numbers.

Question 7. The sum of four consecutive natural number is 954. Find the greatest number.

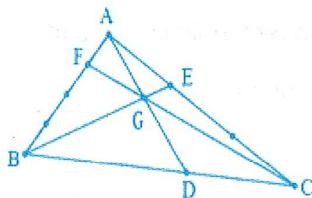
Answer: The greatest number is $\dots\dots$

Question 8. Find n such that:

$$\frac{2}{3} + \frac{2}{15} + \frac{2}{35} + \dots + \frac{2}{n} = \frac{322}{323}.$$

Answer: $n = \dots$

Question 9. Look at the following figure. $\frac{FA}{BA} = \frac{1}{4}$; $\frac{EA}{CA} = \frac{1}{3}$. If the area of triangle GBD is 270m^2 then the area of the triangle GCD is $\dots\text{m}^2$.



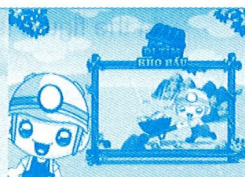
Question 10. Find K such that:

$$K - 2016 = \frac{1 + (1+2) + (1+2+3) + \dots + (1+2+3 + \dots + 2017)}{2017 \times 1 + 2016 \times 2 + 2015 \times 3 + \dots + 2 \times 2016 + 1 \times 2017}.$$

Answer: $K = \dots$

EXAM 3 Treasure Hunting

Let's help the miner to go through the maze by answering 10 questions to reach the destination.



Question 1. Find m if m is a natural number and $m \times 2 + 1 < 1.28 \times 4 < 3 \times m$.

Answer: $m = \dots$

Question 2. If x is a natural number and $\frac{4728}{100} < x$ then the least value of x is $\dots$

Question 3. Peter wrote consecutive numbers from 8 to 723. How many digits did he write?

Answer: There were $\dots$ digits.

Question 4. The average of 4 consecutive even numbers is 123. Find the least number.

Answer: The least number is

Question 5. How many 4-digit numbers are divisible by 2, 3 and 5?

Answer: There are numbers.

Question 6. The length of a rectangle is 7.5cm longer than its width and its perimeter is three times as long as its length. Find its area.

Answer: The area of the rectangle iscm².

Question 7. Find $\overline{abcd}$ such that $\overline{dad} = \overline{abc} \times 5$.

Answer: $\overline{abcd} = \dots\dots$

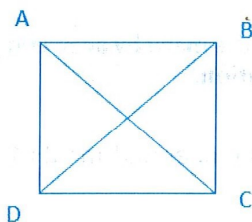
Question 8. The average of three numbers is 32. The second number is two times the first number and the third number is six units more than the second number. Find the first number.

Answer: The first number is

Question 9. Calculate: $\frac{1}{1+2} + \frac{1}{1+2+3} + \frac{1}{1+2+3+4} + \dots\dots + \frac{1}{1+2+3+\dots\dots+100}$.

Answer: The result is

Question 10. Find the area of the square ABCD if the sum of area of all triangle in the figure is 1704cm².



Answer: The area of the square ABCD iscm².

PART II. ANSWER

ROUND 1

TEST 1

EXAM 1.

Question	1	2	3	4	5	6	7	8	9	10
Answer	A	D	B	D	C	C	B	A	C	A

EXAM 2.

Question	1	2	3	4	5	6	7	8	9	10
Answer	2	$273 ; 231$	$\frac{31}{4}$	$>$	400	38	$\frac{1}{5}$	3	9	$\frac{9}{31}$

EXAM 3.

$14 \rightarrow 19 \rightarrow 9 \rightarrow 20 \rightarrow 8 \rightarrow 1 \rightarrow 17 \rightarrow 18 \rightarrow 6 \rightarrow 15$
 $\rightarrow 7 \rightarrow 4 \rightarrow 5 \rightarrow 10 \rightarrow 13 \rightarrow 3 \rightarrow 11 \rightarrow 16 \rightarrow 12 \rightarrow 2.$

TEST 2

EXAM 1.

Question	1	2	3	4	5	6	7	8	9	10
Answer	B	D	D	B	A	C	A	B	C	C

EXAM 2.

Question	1	2	3	4	5	6	7	8	9	10
Answer	$\frac{4}{5}$	24	$\frac{75}{100}$	10	$\frac{8}{7}, \frac{10}{9}, \frac{4}{5}, \frac{3}{5}, \frac{1}{2}$	2	=	14	360	1

EXAM 3.

13 → 6 → 4 → 16 → 19 → 15 → 1 → 18 → 8 → 10
 → 2 → 9 → 12 → 7 → 14 → 20 → 11 → 5 → 17 → 3.

ROUND 2**TEST 1****EXAM 1.**

1 and 12; 2 and 11; 3 and 8; 4 and 17; 5 and 18;
 6 and 14; 7 and 20; 9 and 19; 10 and 15; 13 and 16.

EXAM 2.

Question	1	2	3	4	5	6	7	8	9	10
Answer	60	$\frac{3}{7}$	5005	$\frac{23}{21}, \frac{27}{24}$	325	37	$\frac{12}{15}$	—	10059	$\frac{101}{3}$

EXAM 3.

Question	1	2	3	4	5	6	7	8	9	10
Answer	$\frac{19}{42}$	<	$\frac{29}{21}$	50	12	1495	6300	$\frac{97}{198}$	5	4

TEST 2

EXAM 1.

1 and 12; 2 and 19; 3 and 16; 4 and 14; 5 and 18;

6 and 17; 7 and 13; 8 and 9; 10 and 15; 11 and 20.

EXAM 2.

Question	1	2	3	4	5	6	7	8	9	10
Answer	$\frac{7}{45}$	C	D	$\frac{22}{3}$	$\frac{2}{35}$	21000	$\frac{13}{10}$	270 ; 250	103	30

EXAM 3.

Question	1	2	3	4	5	6	7	8	9	10
Answer	$\frac{31}{6}$	48	$\frac{3}{5}$	$\times$	$\frac{56}{15}$	39	3075	14	$\frac{4}{6}$	=

ROUND 3

TEST 1

EXAM 1.

Question	1	2	3	4	5	6	7	8	9	10
Answer	$\frac{79}{20}$	$\frac{11}{15}$	$\frac{1}{2}$	39	1008 ; 1007	334	5	318 ; 320 ; 322	4	42857

EXAM 2.

$6 \rightarrow 13 \rightarrow 4 \rightarrow 7 \rightarrow 18 \rightarrow 12 \rightarrow 19 \rightarrow 10 \rightarrow 1 \rightarrow 15$
 $\rightarrow 9 \rightarrow 20 \rightarrow 2 \rightarrow 17 \rightarrow 11 \rightarrow 3 \rightarrow 16 \rightarrow 5 \rightarrow 8 \rightarrow 14.$

EXAM 3.

Question	1	2	3	4	5	6	7	8	9	10
Answer	B	D	A	C	B	A	C	A	D	D

TEST 2**EXAM 1.**

Question	1	2	3	4	5	6	7	8	9	10
Answer	$\frac{26}{5}$	60	$\frac{47}{15}$	28	$\frac{17}{35}$	=	10	6	5	12

EXAM 2.

$1 \rightarrow 12 \rightarrow 13 \rightarrow 19 \rightarrow 4 \rightarrow 11 \rightarrow 5 \rightarrow 10 \rightarrow 20 \rightarrow 2$
 $\rightarrow 17 \rightarrow 7 \rightarrow 18 \rightarrow 9 \rightarrow 15 \rightarrow 6 \rightarrow 16 \rightarrow 3 \rightarrow 14 \rightarrow 8.$

EXAM 3.

Question	1	2	3	4	5	6	7	8	9	10
Answer	B	D	D	C	C	A	A	B	D	C

ROUND 4

TEST 1

EXAM 1.

Question	1	2	3	4	5	6	7	8	9	10
Answer	B	C	B	D	A	D	A	D	A	A

EXAM 2.

Question	1	2	3	4	5	6	7	8	9	10
Answer	7	5	3.04	3.24	7.99	2.5357	42;30	20	0.1234	8

EXAM 3.

Question	1	2	3	4	5	6	7	8	9	10
Answer	5	>	3.45; 4.06; 4.6; 5.03; 5.3	4.35	37.254	40.57	22.1	3	=	3;4

TEST 2

EXAM 1.

Question	1	2	3	4	5	6	7	8	9	10
Answer	A	C	B	B	C	D	B	B	A	B

EXAM 2.

Question	1	2	3	4	5	6	7	8	9	10
Answer	5	4.015	29.14	<	11.41	4.53	22.248	23 ; 24	6.7	8

EXAM 3.

Question	1	2	3	4	5	6	7	8	9	10
Answer	1	=	7.02	7.025	>	13.091	125.78	>	3	10;12

ROUND 5**TEST 1****EXAM 1.**

Question	1	2	3	4	5	6	7	8	9	10
Answer	A	B	D	C	B	D	C	A	C	C

EXAM 2.

Question	1	2	3	4	5	6	7	8	9	10
Answer	34.373	12.7	27.79	27.405	2.7	<	4.3	8	6	3.6

EXAM 3.

12 → 17 → 6 → 4 → 19 → 9 → 11 → 14 → 1 → 16
 → 7 → 20 → 13 → 3 → 18 → 8 → 2 → 15 → 5 → 10.

TEST 2

EXAM 1.

Question	1	2	3	4	5	6	7	8	9	10
Answer	B	B	A	C	D	C	A	D	B	C

EXAM 2.

Question	1	2	3	4	5	6	7	8	9	10
Answer	118.2	7.8	93	10.12	27.45	17.25	5.46	5	29.64	121.5

EXAM 3.

$2 \rightarrow 17 \rightarrow 12 \rightarrow 9 \rightarrow 14 \rightarrow 7 \rightarrow 19 \rightarrow 16 \rightarrow 4 \rightarrow 3$
 $\rightarrow 20 \rightarrow 6 \rightarrow 18 \rightarrow 8 \rightarrow 10 \rightarrow 11 \rightarrow 1 \rightarrow 13 \rightarrow 15 \rightarrow 5.$

ROUND 6

TEST 1

EXAM 1:

7 and 10 ; 19 and 4 ; 13 and 12 ; 5 and 20 ; 15 and 2 ;
17 and 8 ; 18 and 3 ; 16 and 6 ; 9 and 14 ; 1 and 11.

EXAM 2.

Question	1	2	3	4	5	6	7	8	9	10
Answer	B	D	A	B	D	8	C	16	50	C

EXAM 3.

Question	1	2	3	4	5	6	7	8	9	10
Answer	0.9	38.5	3.9	3.5	75	8.1	1	0.5	2.5	125

TEST 2

EXAM 1.

15 and 9 ; 2 and 8 ; 17 and 10 ; 3 and 18 ; 6 and 20 ;

1 and 7 ; 12 and 13 ; 19 and 5 ; 11 and 4 ; 14 and 16.

EXAM 2.

Question	1	2	3	4	5	6	7	8	9	10
Answer	A	D	A	B	16	A	12	C	50	B

EXAM 3.

Question	1	2	3	4	5	6	7	8	9	10
Answer	0.756	150	3.75	36.5	68	10.5	2	0.625	8	2

ROUND 7

TEST 1

EXAM 1.

10 → 15 → 17 → 3 → 6 → 19 → 8 → 9 → 1 → 12

→ 14 → 7 → 20 → 2 → 16 → 11 → 4 → 18 → 13 → 5.

EXAM 2.

Question	1	2	3	4	5	6	7	8	9	10
Answer	D	B	C	A	D	B	B	A	B	C

EXAM 3.

Question	1	2	3	4	5	6	7	8	9	10
Answer	57	40	0.1375	39	118	7.175	0.4	8	36	44

TEST 2

EXAM 1.

18 → 7 → 12 → 15 → 5 → 10 → 20 → 13 → 2 → 4
 → 9 → 3 → 19 → 11 → 17 → 16 → 1 → 14 → 6 → 8.

EXAM 2.

Question	1	2	3	4	5	6	7	8	9	10
Answer	C	D	C	D	C	A	B	C	C	B

EXAM 3.

Question	1	2	3	4	5	6	7	8	9	10
Answer	72	705	14.85	2	11	5	48	1300	1	13

ROUND 8

TEST 1

EXAM 1.

Question	1	2	3	4	5	6	7	8	9	10
Answer	19	300	43900	C	18	0.785	21.4	6.5	24	600

EXAM 2.

7 and 13 ; 18 and 12 ; 15 and 4 ; 5 and 19 ; 2 and 10 ;
 20 and 6 ; 1 and 11 ; 9 and 14 ; 8 and 17 ; 3 and 16.

EXAM 3.

Question	1	2	3	4	5	6	7	8	9	10
Answer	91	964	2.54	4 ; 6 ; 8 ; 10	5	17	9.6	30335	484	228

TEST 2

EXAM 1.

Question	1	2	3	4	5	6	7	8	9	10
Answer	35.497	B	D	B	2.7	80	21.42	1215	15	62

EXAM 2.

10 and 16 ; 17 and 4 ; 1 and 7 ; 19 and 8 ; 9 and 20 ;

5 and 18 ; 11 and 2 ; 3 and 15 ; 6 and 14 ; 13 and 12.

EXAM 3.

Question	1	2	3	4	5	6	7	8	9	10
Answer	45	1575	16.8	9	198	55500	27	3.29	161	112.53

ROUND 9

EXAM 1.

Question	1	2	3	4	5	6	7	8	9	10
Answer	285	3846.5	7625000	304	45	315000	61.6	40	375000	36

EXAM 2.

Question	1	2	3	4	5	6	7	8	9	10
Answer	C	B	A	D	C	B	A	B	C	D

EXAM 3.

Question	1	2	3	4	5	6	7	8	9	10
Answer	4.3	12.5	5	67.5	64	4	20	100234	80	7 ; 2

ROUND 10**EXAM 1.**

Question	1	2	3	4	5	6	7	8	9	10
Answer	C	A	B	C	D	A	A	D	C	D

EXAM 2.

Question	1	2	3	4	5	6	7	8	9	10
Answer	25	0.008	5	6120.27	50	7	240	103683	180	2017

EXAM 3.

Question	1	2	3	4	5	6	7	8	9	10
Answer	2	48	2054	120	300	112.5	1035	18	$\frac{99}{101}$	568

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Chịu trách nhiệm xuất bản:

Chủ tịch Hội đồng Thành viên MẠC VĂN THIÊN

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Phó Tổng Giám đốc kiêm Tổng biên tập TS. PHAN XUÂN THÀNH

Tổ chức biên thảo và chịu trách nhiệm nội dung:

Phó Tổng biên tập NGUYỄN THÀNH ANH

Giám đốc Công ty CP Sách dân tộc HÀ THỊ HẢI YẾN

Biên tập lần đầu và tái bản:

ĐẶNG VĂN TUYẾN

LÝ TUYẾT NHUNG

Biên tập mỹ thuật:

ĐẶNG HỒNG QUÂN

Trình bày bìa:

LƯƠNG QUỐC HIỆP

Thiết kế sách và chế bản:

HOÀNG MINH

Công ty Cổ phần Sách dân tộc - Nhà xuất bản Giáo dục Việt Nam giữ quyền công bố tác phẩm

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TỰ LUYỆN VIOLYMPIC TOÁN BẰNG TIẾNG ANH - LỚP 5

Mã số : T5T31t6-CDT

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Số QĐXB: 53/QĐ-GD-HN ngày 12 tháng 01 năm 2016

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