Student Name _____

P

MCAP

Maryland Comprehensive Assessment Program

Grade 5 Mathematics Test Book

Practice Test

Large Print

TEST BOOKLET SECURITY BARCODE

Section 1
(Non-Calculator)

Directions:

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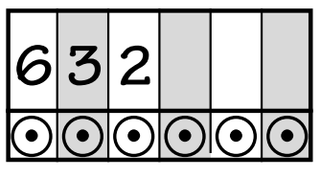
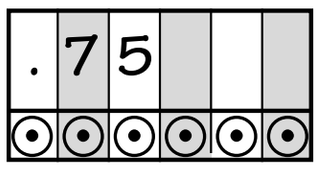
EXAMPLES

To answer 632 in a question, fill in the answer grid as shown below.



To answer .75 in a question, fill in the answer grid as shown below.



1 An expression is shown.

$$76 \times 59$$

What is the value of the expression?

A 1064

B 3554

C 4134

D 4484

2 A student started a project using a pencil with a length of $7\frac{1}{2}$ inches.

After the student completed the project, the pencil had a length of $5\frac{7}{8}$ inches.

How much shorter, in inches, was the pencil after the student completed the project than when the student started the project?

A $1\frac{4}{8}$

B $1\frac{5}{8}$

C $2\frac{3}{8}$

D $2\frac{6}{8}$

3 The length of a table in a classroom is 27 inches.

What is the length of the table in **feet**?

A $\frac{1}{12}$ foot

B $\frac{2}{9}$ foot

C $2\frac{1}{9}$ feet

D $2\frac{1}{4}$ feet

4 A chef made 6 cups of pudding and wants to put all the pudding in bowls. The chef wants to put $\frac{1}{3}$ cup of pudding in each bowl.

The chef wants to determine how many bowls are needed to hold all the pudding.

Which pair of statements describes the operation the chef should perform and the correct number of bowls the chef will need to hold all the pudding?

A The chef should divide 6 by $\frac{1}{3}$. The chef needs 2 bowls to hold all the pudding.

B The chef should divide 6 by $\frac{1}{3}$. The chef needs 18 bowls to hold all the pudding.

C The chef should multiply 6 by $\frac{1}{3}$. The chef needs 2 bowls to hold all the pudding.

D The chef should multiply 6 by $\frac{1}{3}$. The chef needs 18 bowls to hold all the pudding.

5 A phrase is shown.

2 more than the difference of 6 and 3

Which numerical expression represents the phrase?

A $2 + 6 \div 3$

B $2 \times 6 - 3$

C $6 - 3 + 2$

D $6 - 3 \times 2$

6 In which number does the digit 8 have a value that is 10 times as great as the value of the digit 8 in the number 456.789?

A 567.894

B 678.945

C 789.456

D 894.567

7 An expression is shown.

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

What is the value of the expression?

A $\frac{3}{12}$

B $\frac{3}{7}$

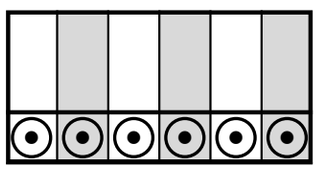
C $\frac{11}{24}$

D $\frac{11}{12}$

8 A rectangular prism has a length of 20 inches, a width of 10 inches, and a height of 12 inches.

What is the volume, in cubic inches, of the rectangular prism?

Enter your answer in the space provided.



9 A student traveled $3\frac{2}{3}$ miles from home to school one morning. After school, the student traveled from school to a friend's house. The distance the student traveled after school was $\frac{3}{5}$ of the distance the student traveled in the morning.

How many miles did the student travel after school?

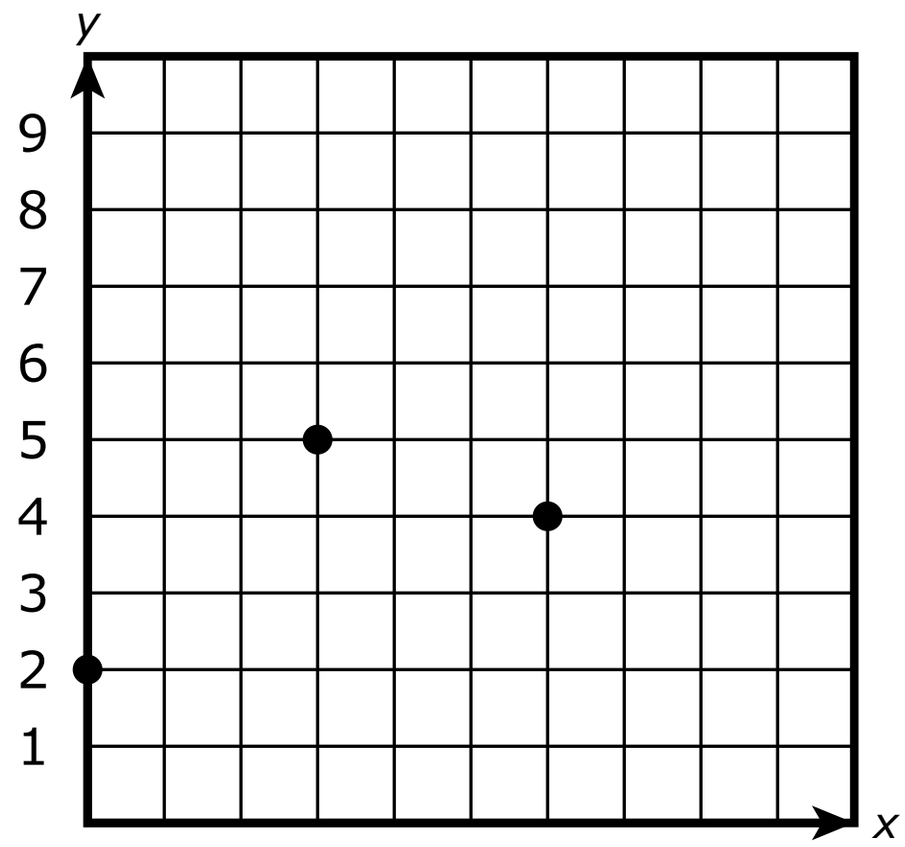
A $2\frac{1}{5}$

B $3\frac{1}{15}$

C $3\frac{2}{5}$

D $6\frac{1}{9}$

10 Three points are shown in the given coordinate plane.



Which **three** pairs of coordinates are the coordinates of the points shown?

Select the **three** correct answers.

A (0, 2)

B (2, 0)

C (3, 5)

D (4, 6)

E (5, 3)

F (6, 4)

11 A package contains $\frac{1}{3}$ pound of deli meat. The meat will be divided evenly among 4 sandwiches.

How much deli meat, in pounds, will be in each sandwich?

A $\frac{1}{12}$

B $\frac{3}{4}$

C $\frac{4}{3}$

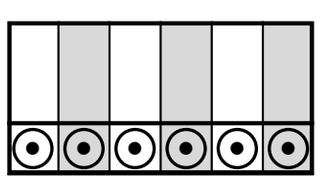
D $\frac{12}{1}$

12 An expression is shown.

$$0.62 - 0.17$$

What is the value of the expression?

Enter your answer in the space provided.



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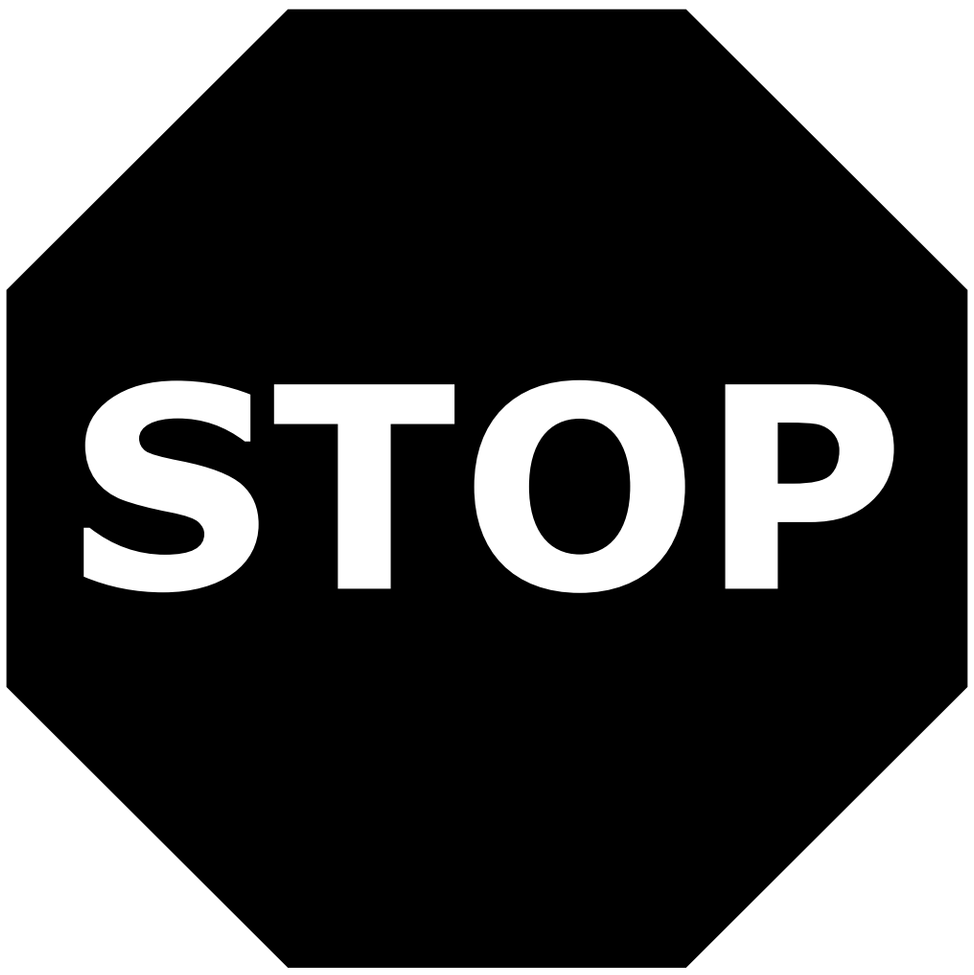

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GO ON TO NEXT PAGE

Section 2
(Calculator)

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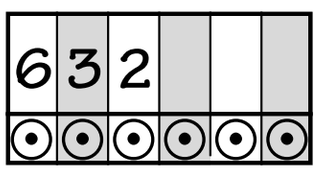

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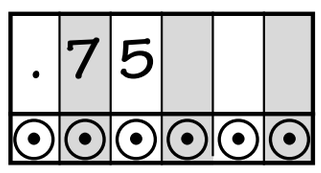


1 A contractor measured the length and the width of two rectangular pieces of land.

- The two pieces of land are adjacent and share the same width of 17 yards.
- The first piece of land has a length of $32\frac{1}{3}$ yards.
- The second piece of land has a length of $25\frac{1}{4}$ yards.

Which steps should the contractor use to determine the area, in square yards, of the two pieces of land altogether?

A Add $32\frac{1}{3}$ and $25\frac{1}{4}$, and then add the result to 17.

B Multiply $32\frac{1}{3}$ and $25\frac{1}{4}$, and then add the result to 17.

C Add $32\frac{1}{3}$ and $25\frac{1}{4}$, and then multiply the result by 17.

D Multiply $32\frac{1}{3}$ and $25\frac{1}{4}$, and then multiply the result by 17.

2 A student says that when a measurement of length in feet is converted to yards, the number of yards will always be a whole number.

Which measurement can be used to show what the student says is incorrect?

A 12 feet

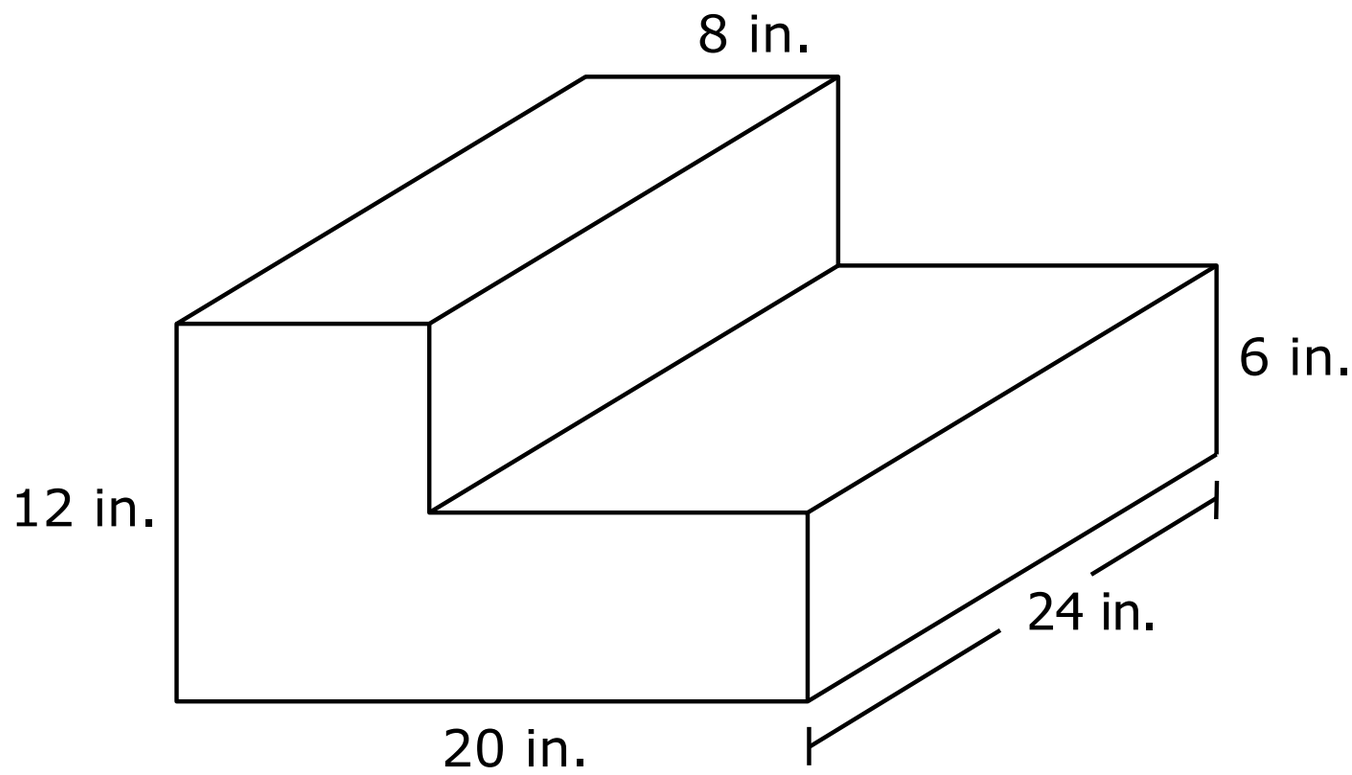
B 16 feet

C 21 feet

D 27 feet

GO ON TO NEXT PAGE

3 A person stacked two gift boxes that are each in the shape of a right rectangular prism. The dimensions of the resulting shape are shown.



What is the total volume, in cubic inches, of the gift boxes?

Enter your answer and your work or explanation in the space provided.

3

4 A teacher is planning a lesson that includes some activities to be completed at a computer.

- There are 18 students in the classroom.
- The students will be split up in groups of the same size.
- Each group will need to use the computer for $\frac{1}{2}$ hour.

Which additional piece of information is needed to determine how long the computer will need to be in the classroom?

A the number of students in each group

B the number of activities that must be completed at the computer

C the number of minutes each group will need to use the computer

D the number of times the computer will be available in the classroom

5 A teacher needs to buy batteries for 32 calculators.

- There are 20 basic calculators that each require 3 batteries.
- There are 12 advanced calculators that each require 4 batteries.
- The batteries are sold in packages of 24.

The teacher thinks that 5 packages of batteries will be needed and that there will be 12 batteries left over after the calculators are filled.

Provide a solution path that shows the teacher is correct. Explain what each step in the solution path represents in terms of the situation.

Enter your answer and your work or explanation in the space provided.

5

6 A student found the value of the expression $10\frac{1}{4} - 6\frac{7}{8}$ using the incorrect steps shown.

Step 1: $10 - 6 = 4$

Step 2: $\frac{7}{8} - \frac{2}{8} = \frac{5}{8}$

The value of $10\frac{1}{4} - 6\frac{7}{8}$ is $4\frac{5}{8}$.

Which steps should the student have used to find the correct value of the expression?

A Step 1: subtract $\frac{2}{8}$ from $\frac{7}{8}$

Step 2: subtract 6 from 10

B Step 1: subtract $\frac{7}{8}$ from $\frac{10}{8}$

Step 2: subtract 6 from 10

C Step 1: regroup the whole number in $10\frac{1}{4}$

Step 2: subtract $\frac{2}{8}$ from $\frac{7}{8}$

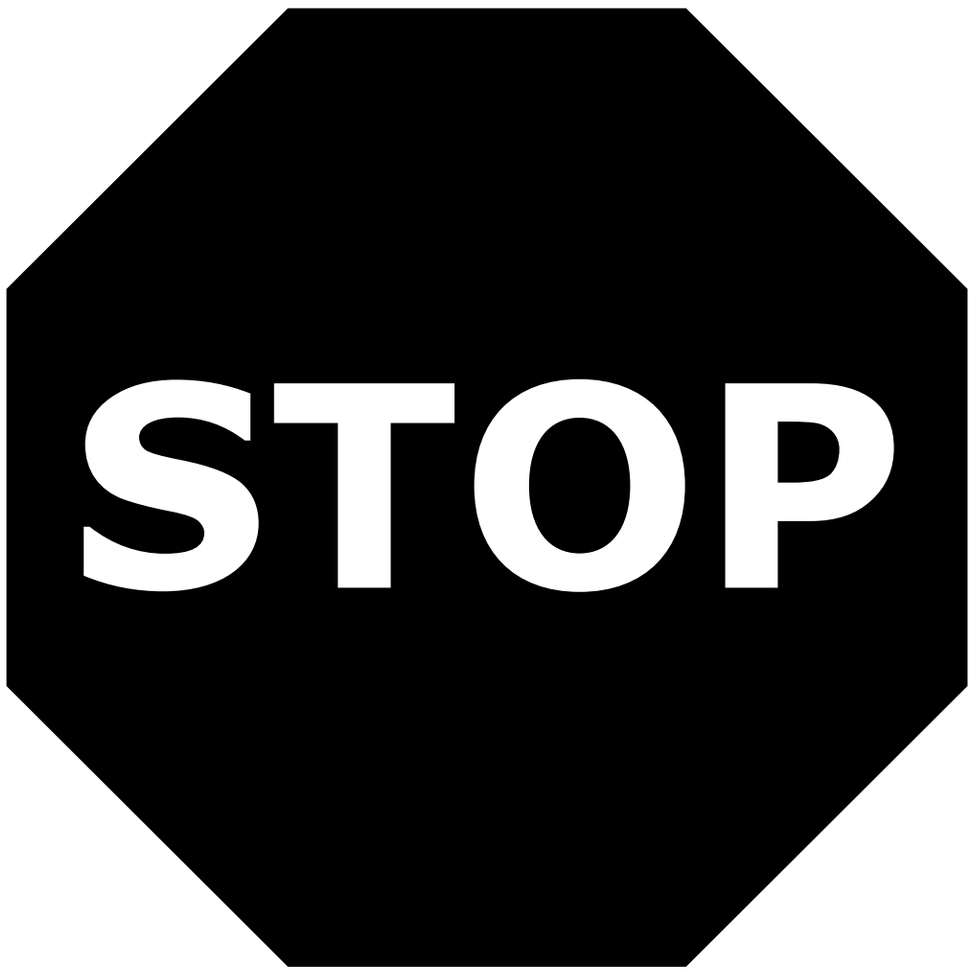
Step 3: subtract 6 from 9

D Step 1: regroup the whole number in $10\frac{1}{4}$

Step 2: subtract $\frac{7}{8}$ from $\frac{10}{8}$

Step 3: subtract 6 from 9

STOP



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Section 3
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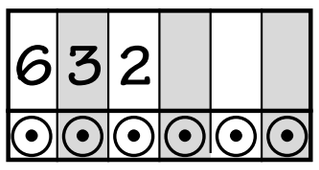

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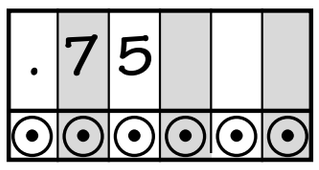


1 A person used a total of 8 cups of flour to make 3 cakes. The person used the same number of cups of flour for each cake.

What amount of flour, in cups, did the person use for each cake?

A $\frac{3}{8}$

B $\frac{8}{3}$

C 5

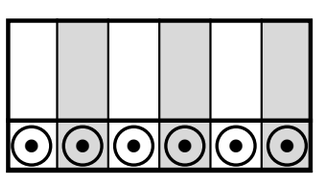
D 24

2 A number is shown in expanded form.

$$3 \times 10 + 6 \times 1 + 8 \times \frac{1}{1000}$$

What is this number in standard form?

Enter your answer in the space provided.



3 Which **two** equations are correct?

Select the **two** correct answers.

A $\frac{1}{5} \div 4 = \frac{4}{5}$

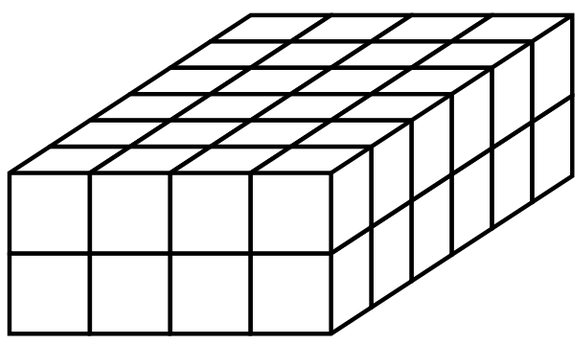
B $\frac{1}{6} \div 2 = \frac{1}{3}$

C $\frac{1}{8} \div 3 = \frac{1}{24}$

D $\frac{1}{10} \div 4 = \frac{5}{2}$

E $\frac{1}{16} \div 2 = \frac{1}{32}$

4 The rectangular prism shown was made from unit cubes.



Which expression represents the total number of unit cubes needed to make the prism?

A $2 \times 4 \times 6$

B $2 + 4 + 6$

C $(4 + 6) \times 2$

D $(4 + 6 + 4 + 6) \times 2$

5 A student drew a quadrilateral. The lengths of the four sides were all different.

Which term could describe the quadrilateral the student drew?

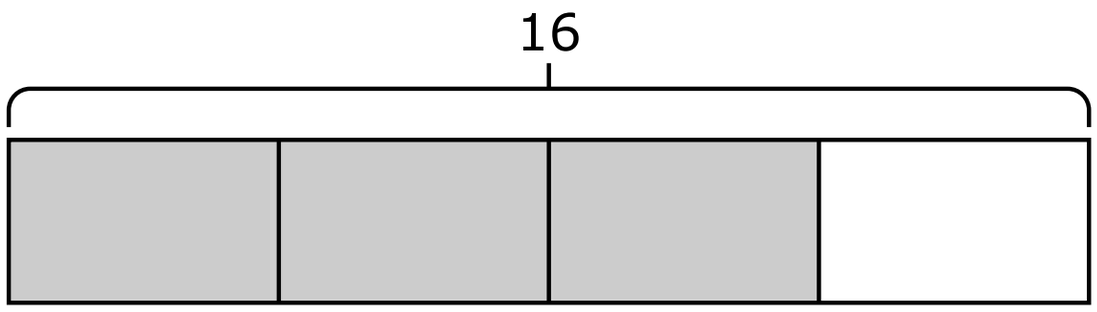
A parallelogram

B rectangle

C rhombus

D trapezoid

6 The given model can be used to show the solution to a word problem. The shaded rectangles in the model represent the solution to the word problem.



Which word problem can be represented by the given model?

A A teacher read 12 pages of a book out loud. A student read $\frac{4}{3}$ times the number of pages the teacher read. How many pages did the student read?

B A student had 12 pennies. The student made a stack with $\frac{3}{4}$ of the pennies. How many pennies did the student put in the stack?

C A group of 16 students went to lunch. Of these students, $\frac{3}{4}$ of them bought milk. How many students bought milk?

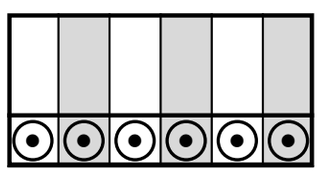
D Each of 16 students in a class drank $\frac{4}{3}$ cups of water. How many cups of water did the students drink in all?

7 An expression is shown.

$$8940 \div 12$$

What is the value of the expression?

Enter your answer in the space provided.



8 The rules used to create two numerical patterns are shown.

- In pattern P, the rule is to add 3 to the previous term.
- In pattern Q, the rule is to add 9 to the previous term.

The table shows the values of some of the terms in each pattern.

Numerical Patterns

Term Number	Pattern P	Pattern Q
1	3	9
2	6	18
3	9	27
4	12	36
5	15	45

What will the value of the term in pattern Q be when the corresponding term in pattern P is 24?

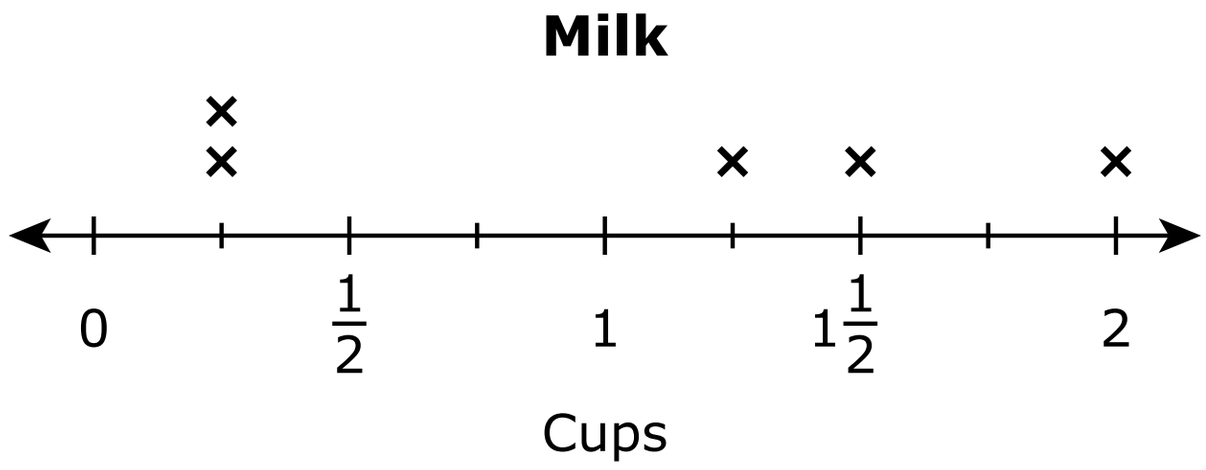
A 30

B 54

C 63

D 72

9 The amount of milk needed for each of 5 recipes is shown on the line plot.



What is the total amount of milk, in cups, needed for the recipes?

A 4

B 5

C $5\frac{1}{4}$

D $5\frac{1}{2}$

10 Which comparison is true?

A $15.347 > 15.374$

B $25.502 < 25.52$

C $35.716 < 35.671$

D $45.280 > 45.28$

11 What is the value of $\frac{5}{7} - \frac{1}{3}$?

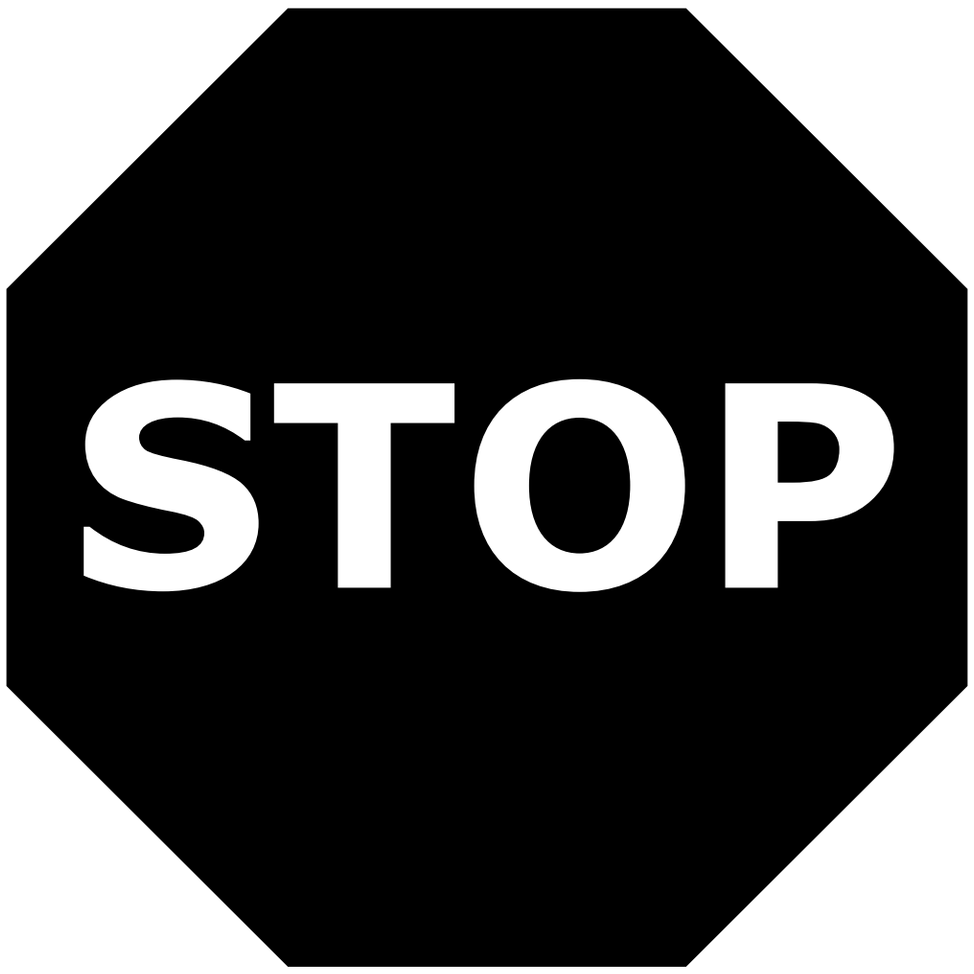
A $\frac{4}{21}$

B $\frac{8}{21}$

C $\frac{4}{7}$

D $\frac{4}{4}$

STOP



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(Calculator)

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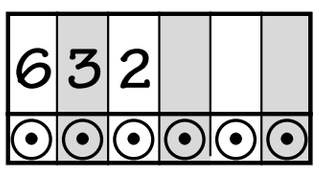

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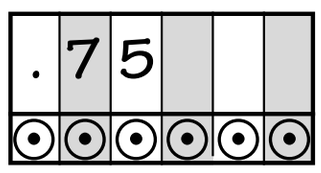
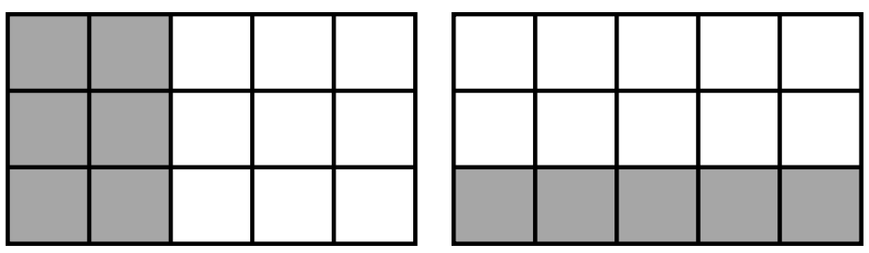


1 Each model shown represents one whole and has been shaded to represent a fraction of the whole.



Which equation can be represented using the models shown?

A $\frac{2}{5} + \frac{1}{3} = \frac{3}{8}$

B $\frac{2}{3} + \frac{1}{2} = \frac{3}{5}$

C $\frac{2}{5} + \frac{1}{3} = \frac{11}{15}$

D $\frac{2}{3} + \frac{1}{2} = \frac{7}{6}$

2 A child used plastic bricks to build 200 figures in 5 hours.

- The child built 60 figures during the first hour and 50 figures during the second hour.
- During the first two hours, the child used 3 bricks to build each figure.
- During each additional hour, the child used 4 bricks to build each figure.

Which **three** questions can be answered using the given information?

Select the **three** correct answers.

A How many figures did the child build using 4 bricks?

B How many bricks did the child use during the fifth hour?

C How many bricks did the child use during the second hour?

D During which hour did the child build the greatest number of figures?

E What is the total number of bricks the child used to build all the figures?

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3 A student performed the division problems shown.

$$1875 \div 15 = 125$$
$$3825 \div 15 = 255$$

The student claims that when a 4-digit number ending in 5 is divided by 15, the quotient always ends in 5 and there is no remainder.

Determine whether the student's claim is correct or incorrect. If the claim is correct, explain why it is correct. If the claim is incorrect, give two examples that prove that it is incorrect.

Enter your answer and your work or explanation in the space provided.

3

4 A shopper buys some fruit.

- The shopper buys a pack of strawberries and 2 kilograms of peaches.
- A pack of strawberries has a mass of 1.2 kilograms and costs $6.55.
- A kilogram of peaches costs $3.29.

Which statement explains the shopper's correct thinking to find the total cost of the fruit?

A The shopper thinks that there is 1 pack of strawberries and 1 kilogram of peaches, and $6.55 + 3.29 = 9.84$.

B The shopper thinks that there is 1 pack of strawberries and 2 kilograms of peaches, and $6.55 + 2 \times 3.29 = 13.13$.

C The shopper thinks that there are 1.2 kilograms of strawberries and 1 kilogram of peaches, and $1.2 \times 6.55 + 3.29 = 11.15$.

D The shopper thinks that there are 1.2 kilograms of strawberries and 2 kilograms of peaches, and $1.2 \times 6.55 + 2 \times 3.29 = 14.44$.

GO ON TO NEXT PAGE

5 A hiker has walnuts, pretzels, and apricots and will use these to make servings of trail mix.

- The hiker will use $\frac{1}{3}$ cup of walnuts, $\frac{1}{2}$ cup of pretzels, and $\frac{1}{4}$ cup of apricots for each serving of trail mix.
- The hiker has 20 cups of walnuts, 24 cups of pretzels, and 18 cups of apricots.

The hiker thinks that 180 servings of trail mix can be made with the ingredients. The steps the hiker used are shown.

First step: $20 \div \frac{1}{3} = 60$

Second step: $24 \div \frac{1}{2} = 48$

Third step: $18 \div \frac{1}{4} = 72$

Fourth step: $60 + 48 + 72 = 180$

Check the hiker's work.

- If a step in the hiker's work is correct, explain what the step represents in terms of the problem.
- If a step in the hiker's work is incorrect, explain how to correct the step.
- If any steps in the hiker's work are incorrect, determine the total number of servings of trail mix the hiker can make with the walnuts, pretzels, and apricots, and determine how many cups of walnuts, pretzels, and apricots will be left over.
- Show your work or explain how you determined your answers.

Enter your answers and your work or explanation in the space provided.

5

6 During a 5-day paper recycling drive, the students in a classroom collected 12.4 pounds of paper each day for 4 days and 8.39 pounds of paper on the fifth day.

Which steps can be used to find the total number of pounds of paper the students collected for the recycling drive?

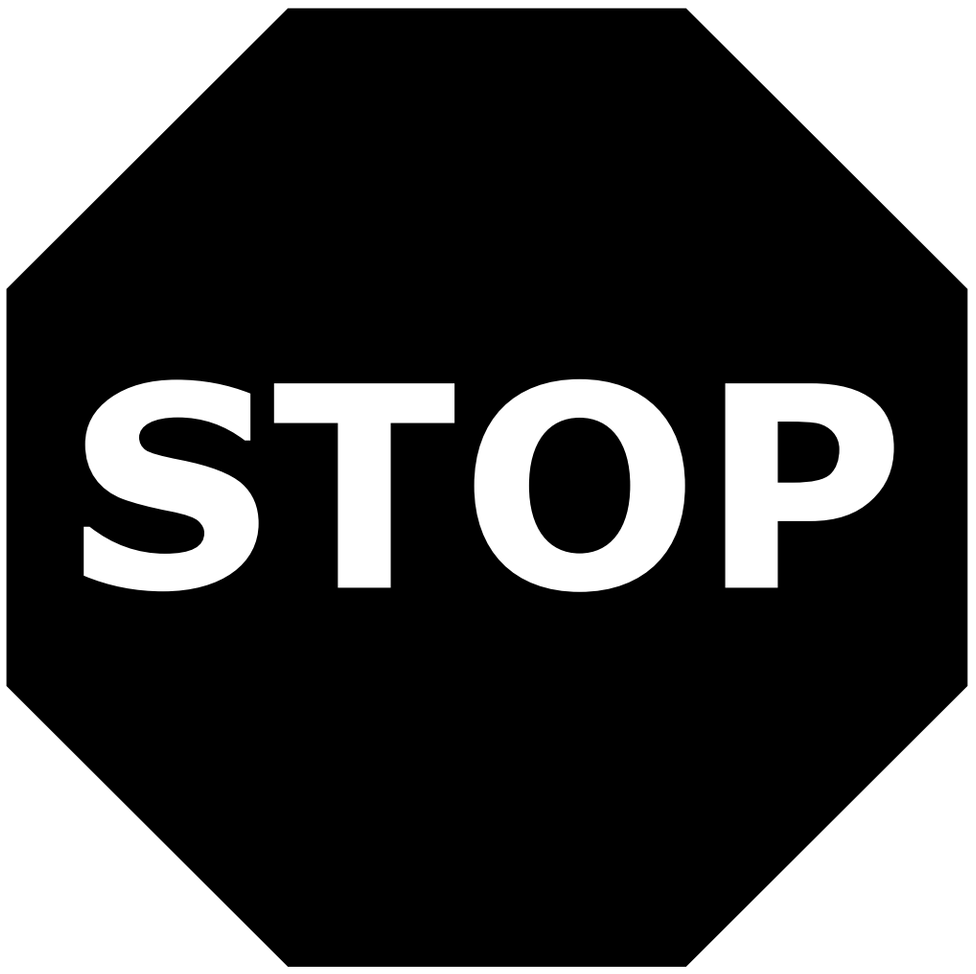
A Multiply 12.4 by 4, and then add 8.39.

B Multiply 12.4 by 5, and then add 8.39.

C Add 12.4 and 8.39, and then multiply the result by 4.

D Add 12.4 and 8.39, and then multiply the result by 5.

STOP



You have come to the end of Section 4 of the test. Review your answers from Section 4 only.

P

5-MATH

1162230 1 2 3 4 5 A B C D E Printed in the USA ISD41769