Student Name _____

P

MCAP

Maryland Comprehensive Assessment Program

Grade 4 Mathematics Test Book

Practice Test

Large Print

TEST BOOKLET SECURITY BARCODE

Section 1
(Non-Calculator)

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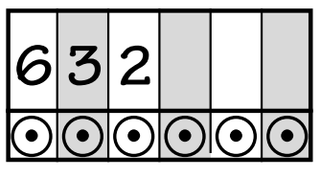
EXAMPLES

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



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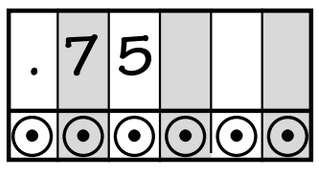


1 Three numbers are listed.

- 0.67
- 0.8
- 0.35

Which list shows these numbers in order from least to greatest?

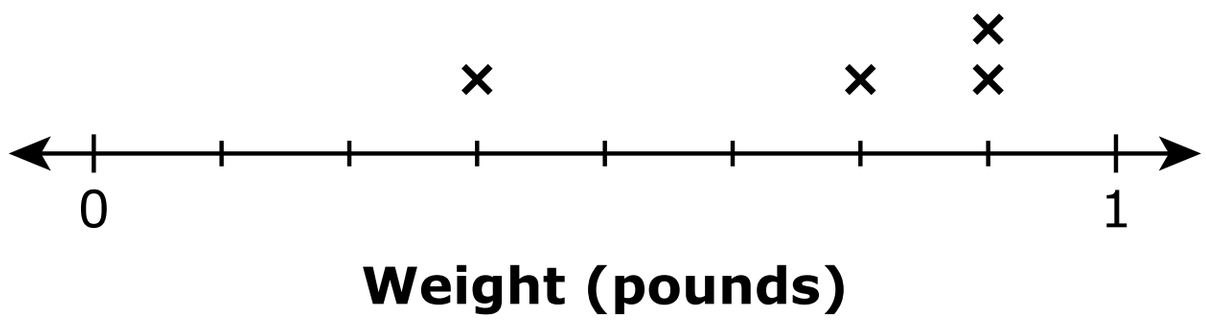
A 0.35, 0.67, 0.8

B 0.8, 0.35, 0.67

C 0.35, 0.8, 0.67

D 0.8, 0.67, 0.35

2 This line plot shows the weights, in pounds, of different objects in a student's backpack.



What is the difference, in pounds, between the greatest weight and the least weight?

A $\frac{3}{8}$

B $\frac{4}{8}$

C $\frac{5}{8}$

D $\frac{6}{8}$

3 Which **two** comparisons are true?

Select the **two** correct answers.

A 999,999 < 1,000,000

B 253,800 > 443,166

C 42,709 = 42,907

D 24,604 < 24,218

E 11,386 > 11,368

4 An expression is shown.

$$\frac{27}{100} + \frac{7}{10}$$

What is the value of the expression?

A $\frac{97}{200}$

B $\frac{97}{100}$

C $\frac{34}{110}$

D $\frac{34}{100}$

5 Which statement is true?

A The number 48,173 rounded to the nearest ten is 48,180.

B The number 48,173 rounded to the nearest hundred is 48,100.

C The number 48,173 rounded to the nearest thousand is 48,000.

D The number 48,173 rounded to the nearest ten thousand is 40,000.

6 There are 5 motorcycles in a parking lot. The number of cars in the parking lot is 8 times as many as the number of motorcycles.

Which equation shows how to find the number of cars in the parking lot?

A $5 \times 8 = 40$

B $5 + 8 = 13$

C $5 = 8 \times 40$

D $5 = 8 + 13$

7 A comparison is shown with a question mark representing a missing number.

$$\frac{2}{?} < \frac{3}{10}$$

Which number could be represented by the question mark to make the comparison true?

A 4

B 5

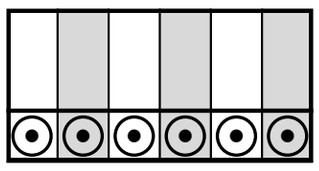
C 6

D 8

8 What is the value of the expression?

$5217 - 3146$

Enter your answer in the space provided.



9 A person buys a bottle that contains 5 gallons of water. The person drinks 2 pints of water from the bottle each day.

How many days will it take the person to drink all the water in the bottle?

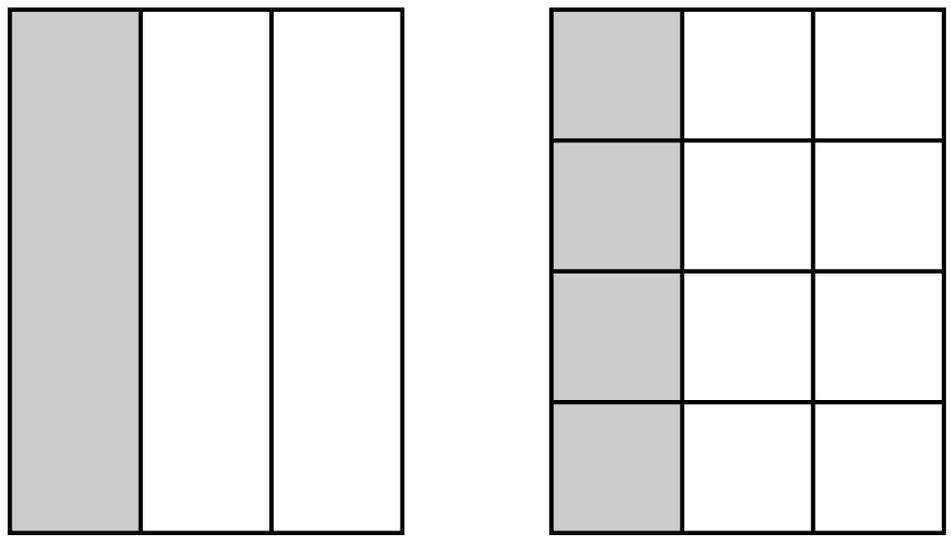
A 5

B 10

C 20

D 40

10 Each model shown represents one whole, and each model is partitioned into equal parts.



Model 1

Model 2

Which expression represents the equivalent fractions shown by the shaded parts in the models?

A $\frac{1}{3} = \frac{1+3}{3+3}$

B $\frac{1}{3} = \frac{1\times4}{3\times4}$

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

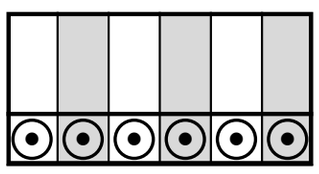
D $\frac{1}{2} = \frac{1\times4}{2\times4}$

11 A student will prepare 20 gift bags. Each bag will have 10 stickers.

The student already has 50 stickers and will buy more stickers in packages. Each package has 15 stickers.

How many packages of stickers does the student need to buy?

Enter your answer in the space provided.



12 A worker mixed $2\frac{7}{8}$ gallons of yellow paint with $4\frac{3}{8}$ gallons of blue paint to make green paint.

How many gallons of green paint did the worker make?

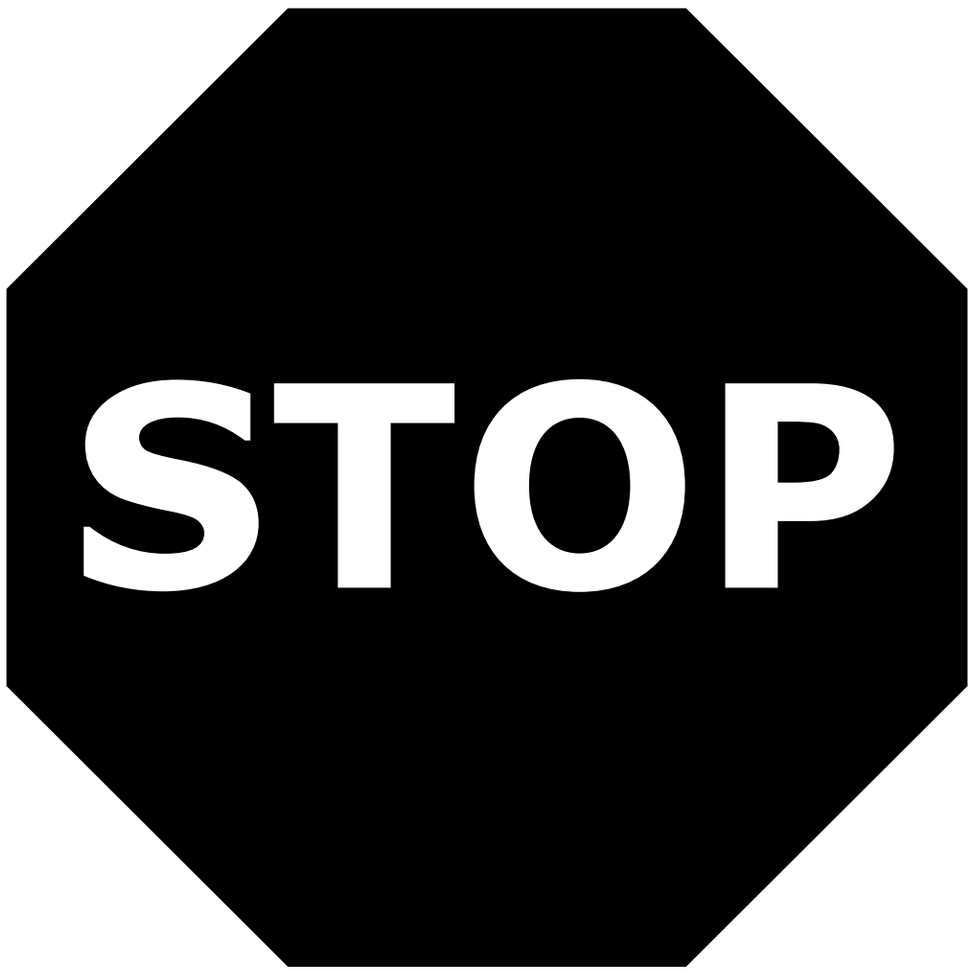
A $7\frac{2}{8}$

B $7\frac{1}{16}$

C $6\frac{10}{16}$

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

STOP



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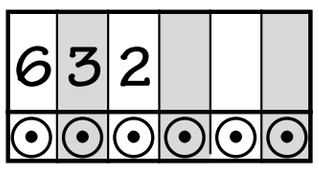

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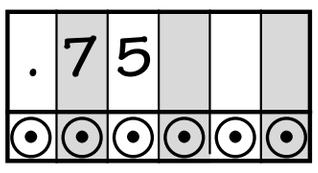
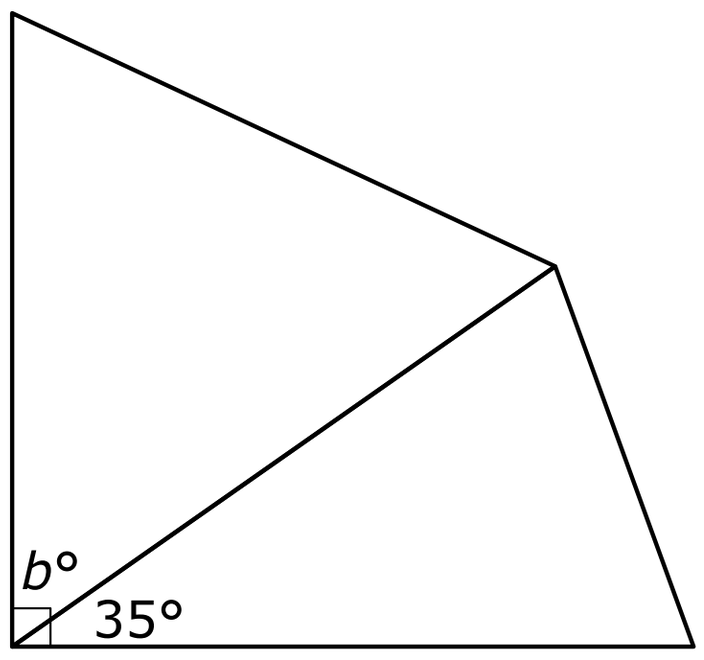


1 A student drew a quadrilateral with one right angle. The student then divided the quadrilateral into two triangles. The student measured one angle in one of the triangles as shown in the figure.



Which solution path could the student use to find the value of *b* without measuring the angle?

A subtract 35 from 90

B multiply 35 by 90

C divide 90 by 35

D add 35 to 90

2 A student rounded 3872 to the nearest hundred and to the nearest thousand. The student noticed that the results, 3900 and 4000, were not equal. The student claimed that the two results will never be equal when a number is rounded to the nearest hundred and to the nearest thousand.

Which **two** numbers could be used to show that the student's claim is incorrect?

Select the **two** correct answers.

A 43,594

B 55,962

C 67,299

D 72,357

E 81,974

GO ON TO NEXT PAGE

3 A train museum has a toy train that goes around the entire museum. The train goes around 10 times in 2 hours.

A student calculated the amount of time it takes for the train to go around 1 time. The work is shown.

Student Work

2 hours ÷10 = 0.2 hour

0.2 is the same as 0.20, so it takes 20 minutes for the train to go around 1 time.

The student's work is incorrect.

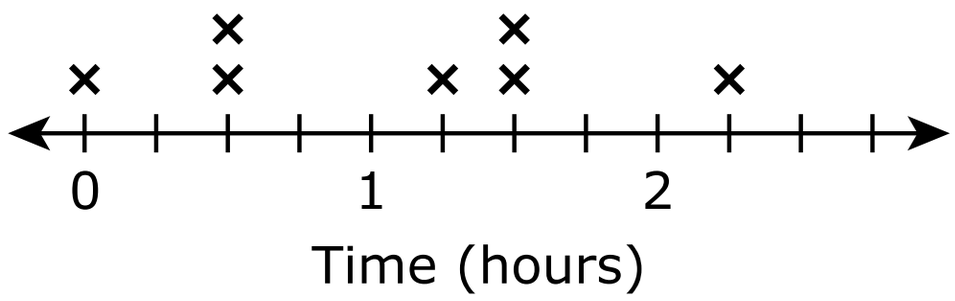
- Explain any errors in the student's work.
- Explain how to correct the student's work and find the amount of time it takes for the train to go around the museum 1 time.

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

3

4 Last week, a student kept track of how long soccer practice lasted each day.

The line plot shows the student's data.



Which question can be answered using **all** of the information in the line plot?

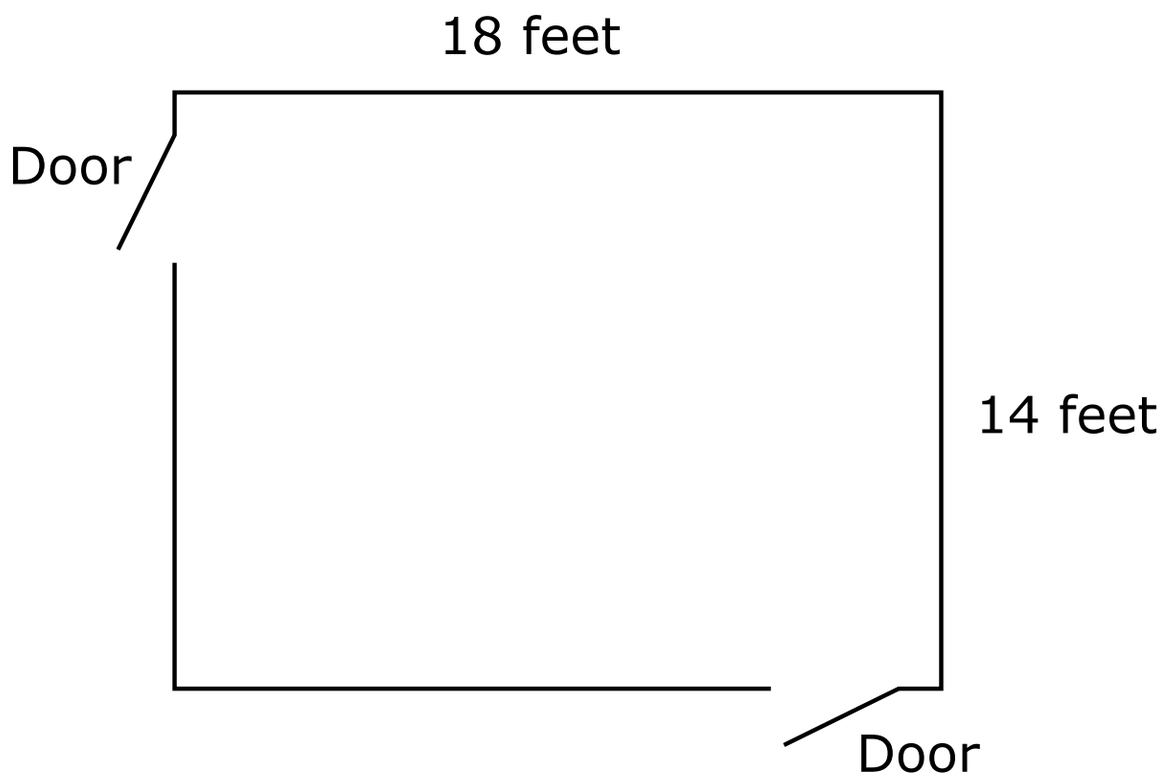
A On which day last week did soccer practice last the longest?

B On which days last week did soccer practice last more than 1 hour?

C What was the total amount of time soccer practice lasted last week?

D What was the greatest amount of time soccer practice lasted on any day last week?

5 The figure shows the dimensions of a rectangular floor. The two openings represent doors. Each door is 3 feet wide.



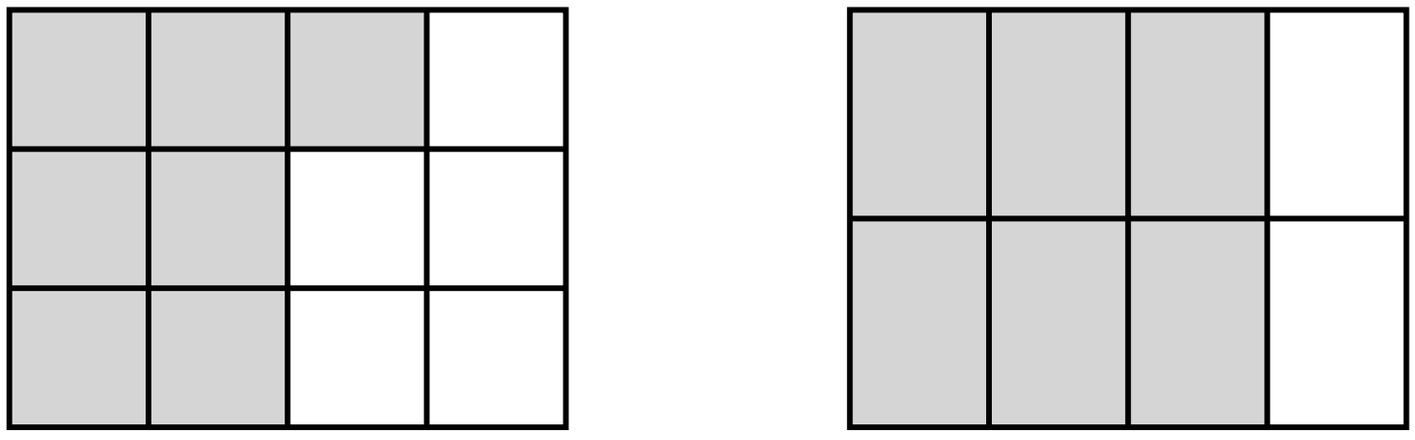
A contractor will buy trim to place along all the edges of the floor, except where the doors are. Each piece of trim is 8 feet long and costs $11.

Find the total cost of the trim the contractor needs to buy for the room.

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

5

6 A student used these models to compare the fractions $\frac{7}{12}$ and $\frac{6}{8}$. The student incorrectly claimed that $\frac{7}{12} > \frac{6}{8}$ because more sections are shaded in the model that represents the fraction $\frac{7}{12}$ than in the model that represents the fraction $\frac{6}{8}$.



Which statements explain why the claim is incorrect?

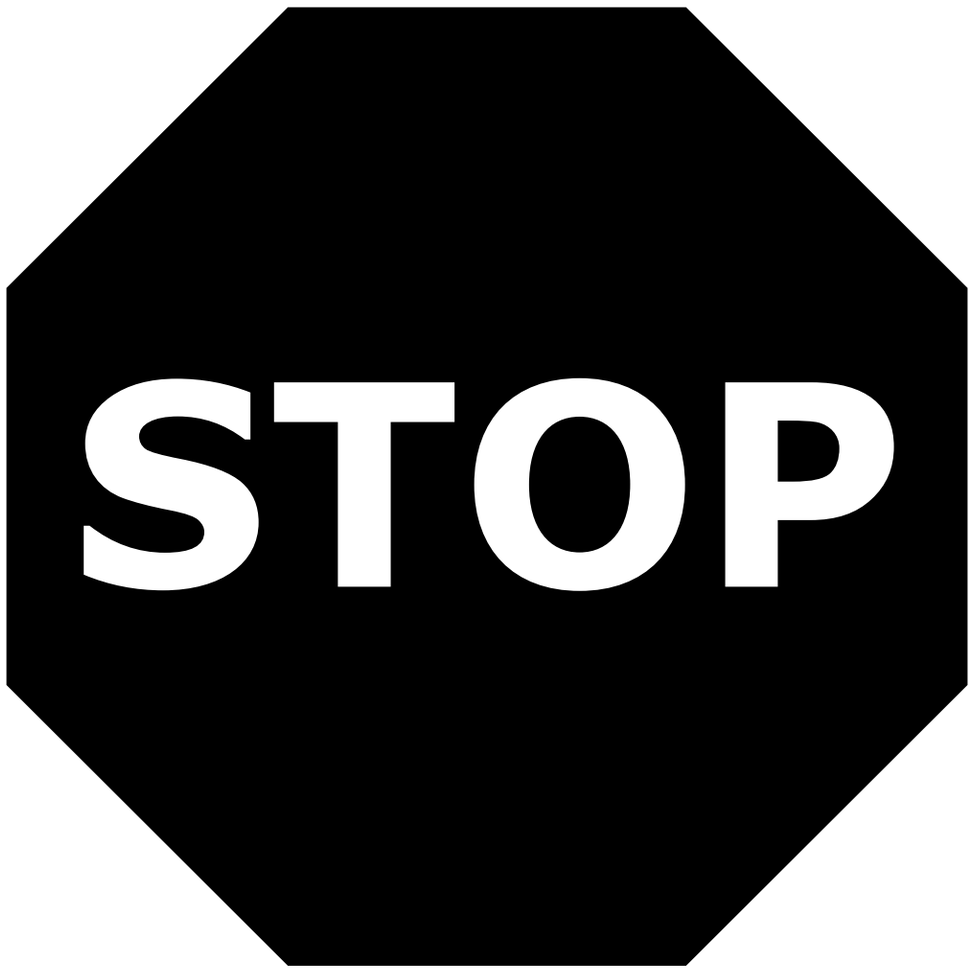
A The student only compared the numerators. The student should have compared the number of parts and the shape of each part in each model.

B The student only compared the denominators. The student should have compared the number of parts and the shape of each part in each model.

C The student only compared the numerators. The student should have compared the number of shaded parts and the size of each part in each model.

D The student only compared the denominators. The student should have compared the number of shaded parts and the size of each part in each model.

STOP



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Section 3
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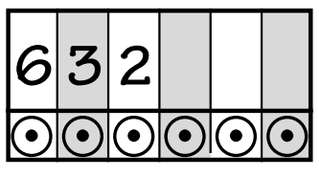

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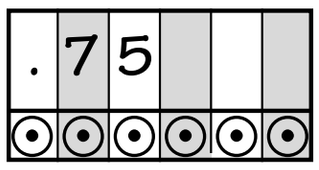
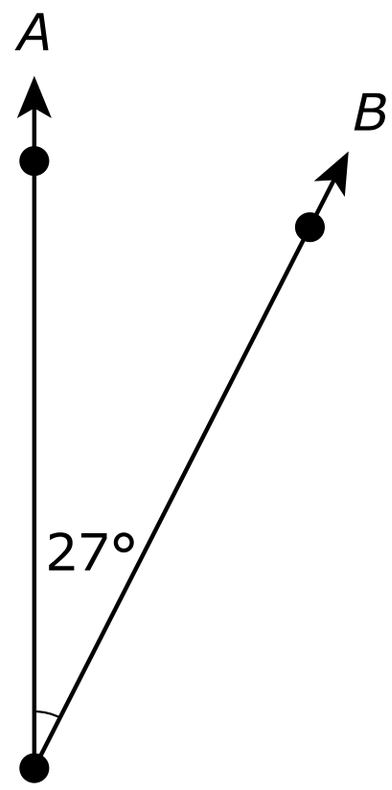


1 The diagram shows angle *ACB*.



Which statement is true about angle *ACB*?

A The number of 1° angles that angle *ACB* turns through is 27.

B The number of 7° angles that angle *ACB* turns through is 20.

C The number of 20° angles that angle *ACB* turns through is 7.

D The number of 90° angles that angle *ACB* turns through is 27.

2 What is the value of $4\frac{1}{4} - 1\frac{3}{4}$?

A $3\frac{3}{4}$

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

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

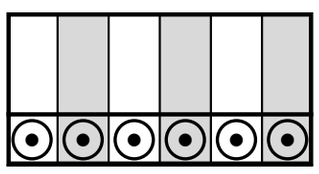
D $2\frac{2}{4}$

3 An expression is shown.

$$3186 \times 4$$

What is the value of the expression?

Enter your answer in the space provided.



4 Which expression has a value of $\frac{11}{12}$?

A $\frac{5}{12} + \frac{2}{12} + \frac{1}{12}$

B $\frac{2}{12} + \frac{4}{12} + \frac{3}{12}$

C $\frac{2}{12} + \frac{4}{12} + \frac{5}{12}$

D $\frac{5}{12} + \frac{6}{12} + \frac{1}{12}$

5 Which two problems are solved using 30×40?

Select the **two** correct answers.

A One box has 30 pencils. Another box has 40 pencils. How many pencils are in the boxes in all?

B There are 30 slides in a small playground. There are 40 slides in a large playground. How many slides are in the small and large playgrounds?

C A classroom has 30 books. The number of pages in the books is 40 times as many as the number of books. How many pages are in the books?

D One elementary school has 30 teachers. There are 40 more teachers at a middle school than the elementary school. How many teachers are at the middle school?

E There are 30 clerks at a store. The number of hours the clerks worked this week is 40 times as many as the number of clerks. How many hours did the clerks work this week?

6 A student walked around a field 3 times. The distance around the field is $\frac{3}{10}$ mile.

What is the total distance the student walked?

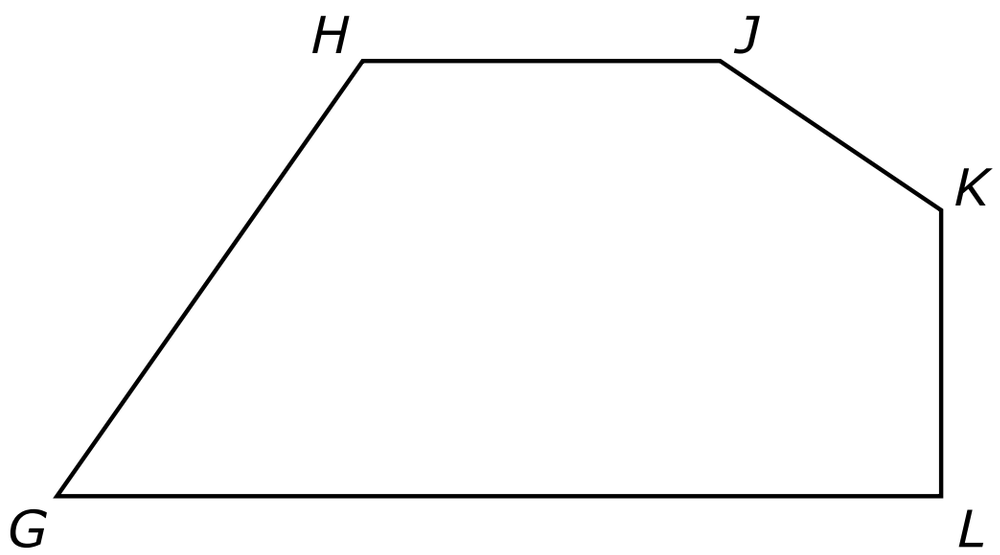
A $\frac{9}{30}$ mile

B $\frac{6}{11}$ mile

C $\frac{6}{10}$ mile

D $\frac{9}{10}$ mile

7 A pentagon is shown.



Which statement appears to be true about two sides of the pentagon?

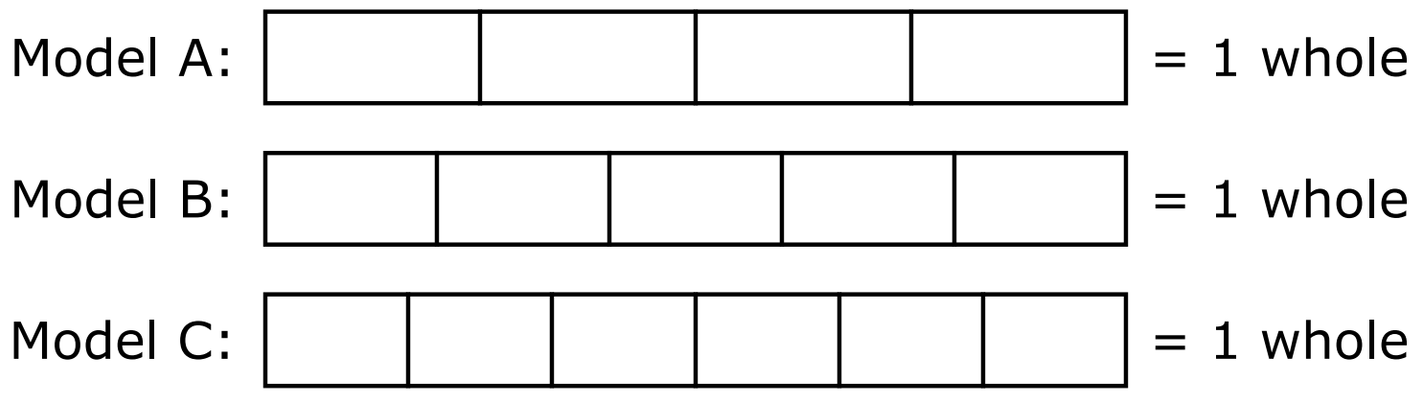
A Side *GH* is parallel to side *JK*.

B Side *GL* is parallel to side *HJ*.

C Side *GL* is perpendicular to side *HJ*.

D Side *GH* is perpendicular to side *JK*.

8 Each of these models is divided into equal parts.



A baker will make 3 pies. The baker needs $\frac{1}{4}$ teaspoon of salt for each pie. The baker will shade parts in one of the models to represent the fraction of a teaspoon of salt needed for 3 pies.

How many parts should be shaded in which model?

A 3 parts in Model A should be shaded.

B 3 parts in Model C should be shaded.

C 4 parts in Model B should be shaded.

D 4 parts in Model C should be shaded.

9 The rules for a number pattern are shown.

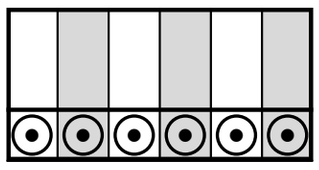
- The first number in the pattern is 3.
- Each number after the first number is 4 more than the previous number.

The first five numbers in the pattern are shown.

3, 7, 11, 15, 19

What is the seventh number in the pattern?

Enter your answer in the space provided.



10 Which decimal is equivalent to $\frac{62}{100}$?

A 0.10062

B 0.062

C 0.62

D 0.62100

11 The model shown represents the quotient of two whole numbers.

	1000	900	30	8
5	5000	4500	150	40

Which equation is represented by the model?

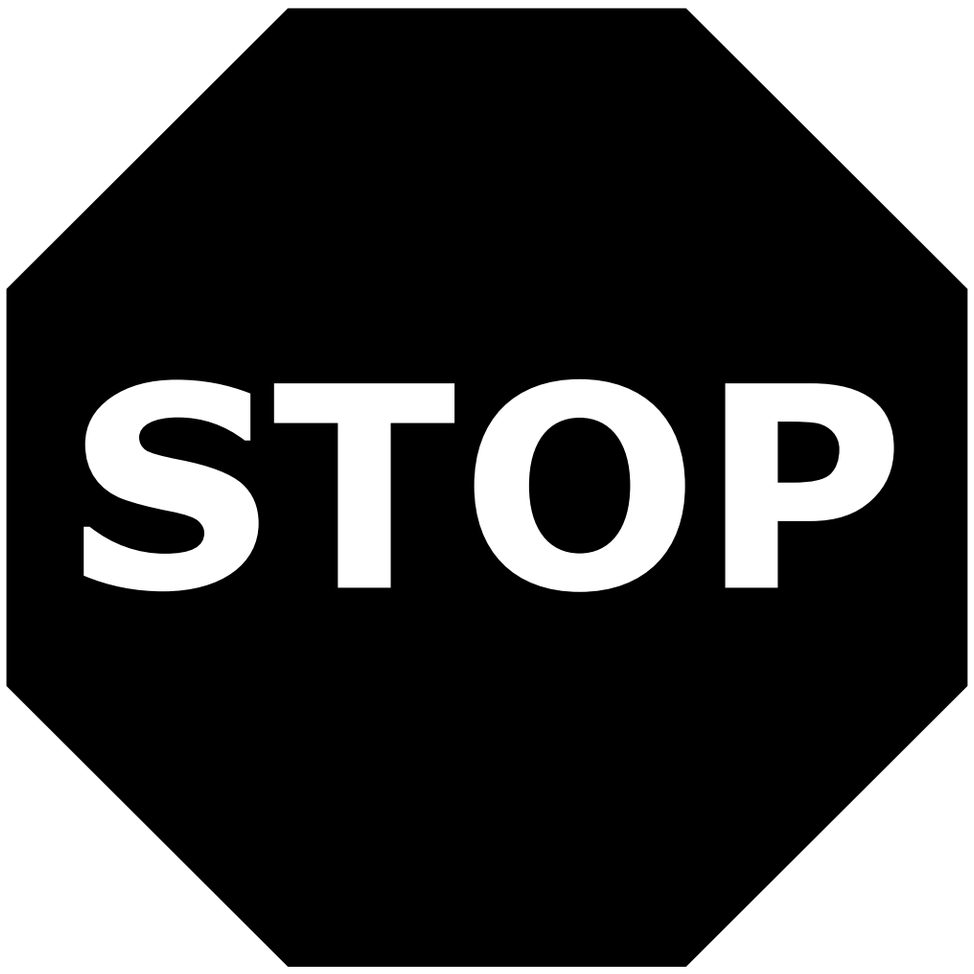
A $9540 \div 5 = 1938$

B $9590 \div 5 = 1938$

C $9650 \div 5 = 1938$

D $9690 \div 5 = 1938$

STOP



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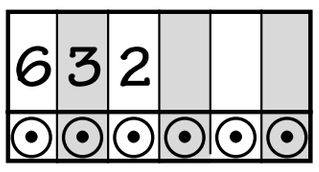

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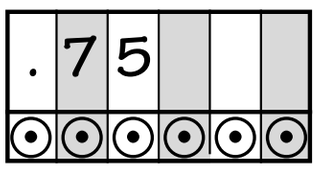
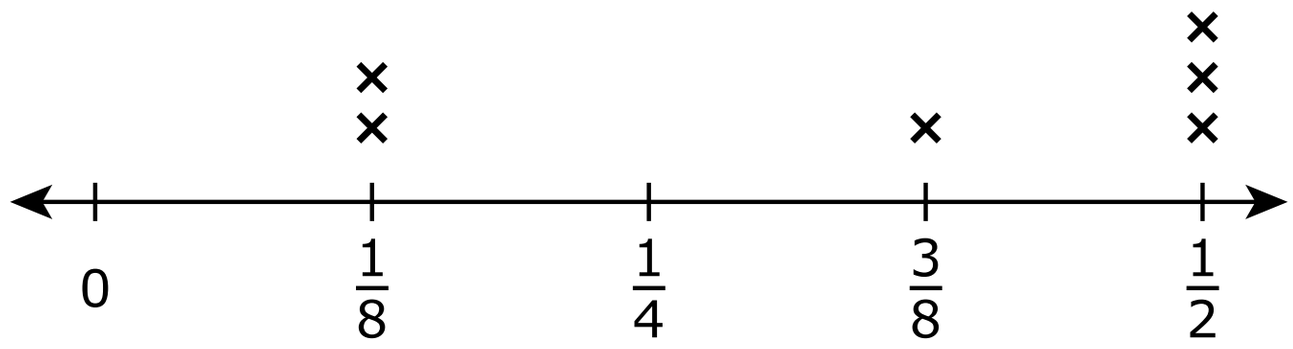


1 There are six different pies left over after a party. Each of the pies has a fractional amount left at the end of the party. The line plot shows the fractions of pies leftover.



Each person who attended the party will receive an equal amount of the leftover pie.

Which piece of information is needed to determine how much pie each person should receive?

A the types of pie that are left over

B the type of pie each person likes most

C the number of slices in each whole pie

D the number of people who attended the party

2 A teacher with 25 students needs to prepare 40 one-page worksheets for each student. Each package of paper has 500 pages. The teacher thinks that 2 packages of paper are needed.

Which **two** steps are part of a solution path to show why the teacher's thinking is correct?

Select the **two** correct answers.

A Add 40 to 25 to determine the total number of worksheets the teacher needs.

B Divide 40 by 25 to determine the total number of worksheets the teacher needs.

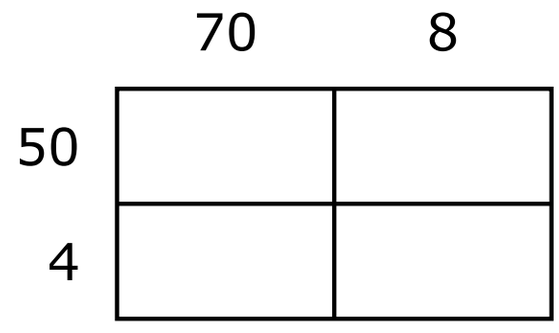
C Multiply 40 by 25 to determine the total number of worksheets the teacher needs.

D Add the total number of worksheets to 500 to determine the number of packages the teacher needs.

E Divide the total number of worksheets by 500 to determine the number of packages the teacher needs.

F Multiply the total number of worksheets by 500 to determine the number of packages the teacher needs.

3 A model is shown.

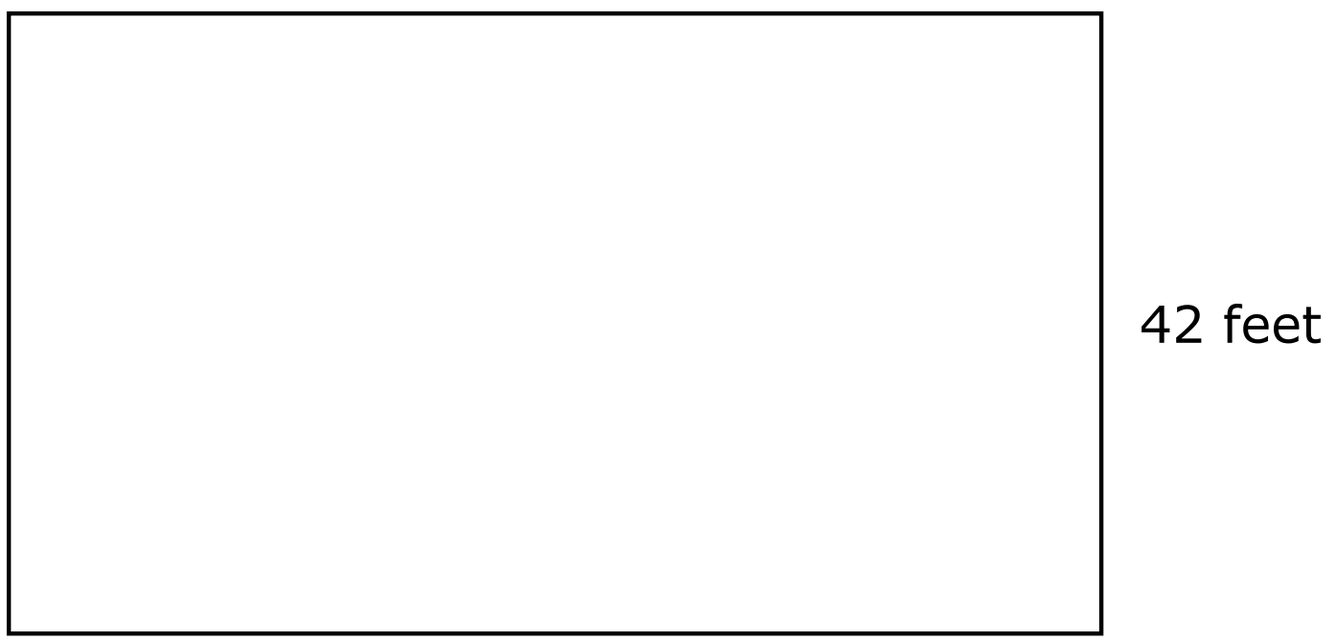


Explain how the model could be used to find the result of 54×78. Then find the result of 54×78.

Enter your answer and your explanation in the space provided.

3

4 The figure represents a rectangular floor. A worker is installing tiles on the floor. Each tile covers 2 square feet of area.



Which steps should the worker take to find the number of tiles needed?

A First, find the value of $42 + 74 + 42 + 74$. Next, divide the result by 2.

B First, find the value of $42 + 74 + 42 + 74$. Next, multiply the result by 2.

C First, find the value of 42×74. Next, divide the result by 2.

D First, find the value of 42×74. Next, multiply the result by 2.

GO ON TO NEXT PAGE

5 An athlete has a goal to exercise $4\frac{5}{10}$ hours each week. The list shows information about how much time the athlete has already exercised this week.

- The athlete exercised $\frac{6}{10}$ hour on Sunday.
- The athlete exercised $\frac{3}{10}$ hour on Monday.
- On Tuesday, Wednesday, and Thursday, the athlete exercised $\frac{4}{10}$ hour each day.

The athlete thinks that an additional $\frac{6}{10}$ hour of exercise is needed this week to reach the goal. The athlete used the steps shown.

Step one: $\frac{6}{10} + \frac{3}{10} + \frac{4}{10} = 1\frac{3}{10}$

Step two: $1\frac{3}{10} \times 3 = 3\frac{9}{10}$

Step three: $4\frac{5}{10} - 3\frac{9}{10} = \frac{6}{10}$

Check the athlete's work. Explain how the athlete's work correctly or incorrectly represents the problem. If the work is incorrect, find the correct amount of time the athlete still needs to exercise this week to reach the goal.

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

5

6 A student colored a whole fraction model. Each part of the model was colored either red, yellow, or blue. The table shows the fractions of the model that were colored either red or yellow. The fraction of the model that was colored blue is missing.

Whole Model

Color	Fraction of Model
Red	$\frac{4}{10}$
Yellow	$\frac{18}{100}$
Blue	?

The student used this work to explain that $\frac{78}{100}$ of the model was colored blue.

Student Work

Step one: $\frac{4}{10} + \frac{18}{100} = \frac{4+18}{100} = \frac{22}{100}$, so $\frac{22}{100}$ of the model was colored red or yellow.

Step two: $\frac{100}{100} - \frac{22}{100} = \frac{78}{100}$ of the model was colored blue.

The student made a mistake solving the problem.

Which statement explains how to correct the error in the student's work?

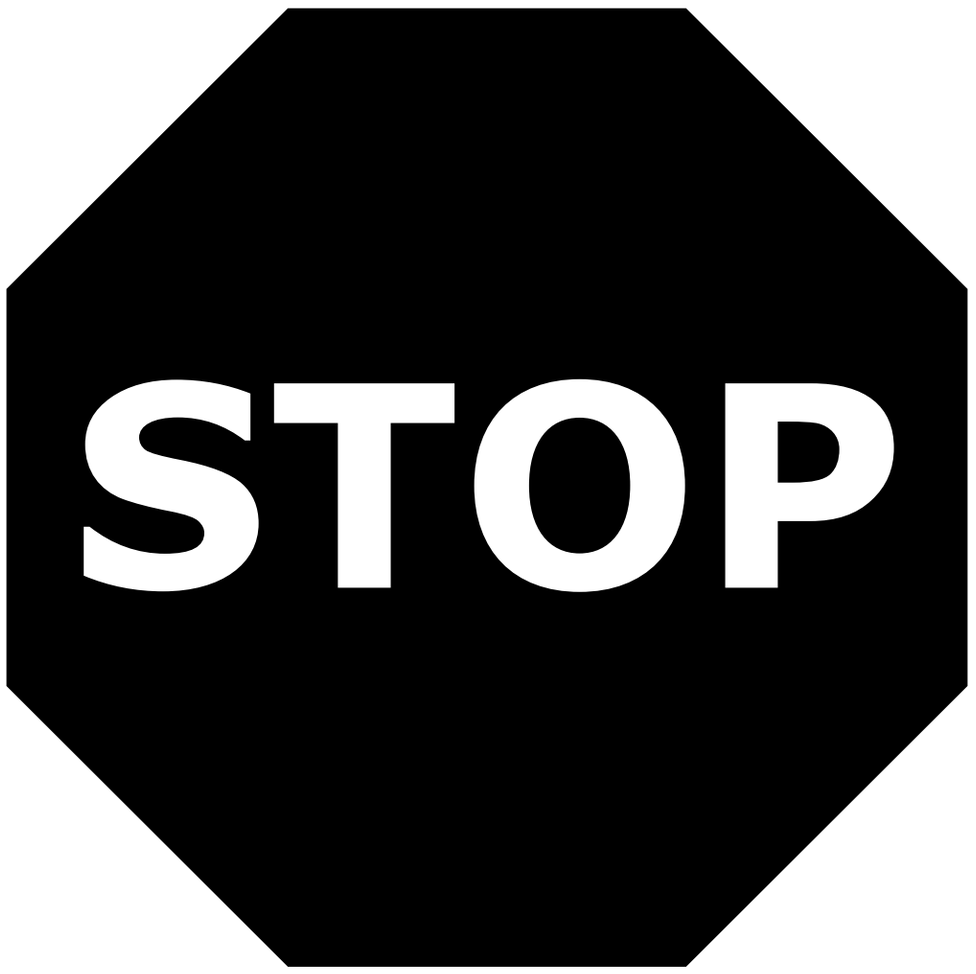
A In step one, the denominator of $\frac{4+18}{100}$ should be 10.

B In step one, the fractions that were added should be $\frac{40}{100} + \frac{18}{100}$.

C In step two, the result of subtracting the fractions should be $\frac{88}{100}$.

D In step one, the $\frac{22}{100}$ represents the fraction of the model that was colored blue.

STOP



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

P

4-MATH

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