



Math

Spring 2017

Grade 3

Released Items

1.

VH093469

Which can be represented by the expression  $6 \times 3$  ?

- A. Henry draws 6 stars. He erases 3 stars.
- B. Jen draws 6 sets of stars. Then she draws 3 more stars.
- C. Nina draws 6 rows of stars. She draws 3 stars in each row.
- D. Barry draws 6 stars. Then he circles 3 equal groups of stars.

2.

M00001

Add.


$$527 + 359$$

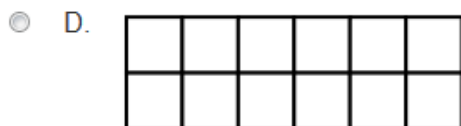
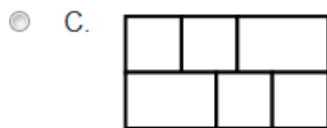
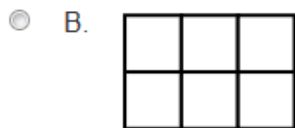
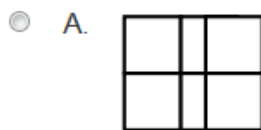
Enter your answer in the box.

3.

VF647230

Which rectangle has an area of exactly 6 square units?

 = 1 square unit
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Several of the students in Ms. Gregory's class were in a jumping contest. The lengths of two students' jumps are shown.

- Kevin's jump was 41 inches.
- Mark's jump was 17 inches.

**Part A**

Tamara jumped 19 inches farther than Mark.

How long was Tamara's jump?

Enter your answer in the box.

 inches**Part B**

Xavier's jump was 16 inches shorter than Kevin's jump.

How far did Xavier jump?

Enter your answer in the box.

 inches**Part C**

Jason also took a jump. The total distance the five students jumped was 152 inches.

- What is the total distance the other four students jumped?
- How far did Jason jump?

Show all your work.

Enter your answers and show your work in the space provided.

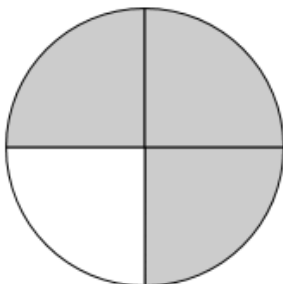


▼ Math symbols

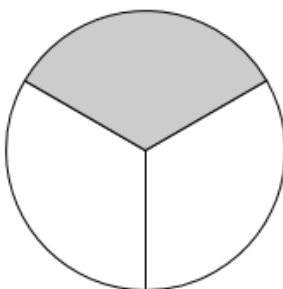
+	-	×	÷
$\frac{\square}{\square}$	$\frac{\square}{\square}$	(-)	[ ]
=	<	>	≠
\$	°	?	

In each model, the circle equals 1 whole. Which model shows  $\frac{3}{4}$  shaded?

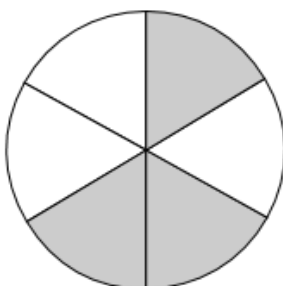
A.



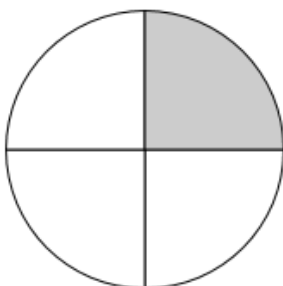
B.



C.



D.



6.

M01386

Shiann plans to make a garden with 9 rows of 7 plants each. Which equations can Shiann use to find the total number of plants needed for her garden?

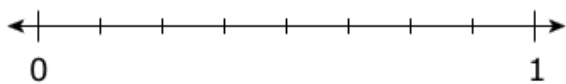
Select the **three** correct equations.

- A.  $9 + 7 = ?$
- B.  $9 \times 7 = ?$
- C.  $? = 7 + 9$
- D.  $? = 7 \times 9$
- E.  $7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 = ?$
- F.  $9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 = ?$

7.

VF889661

Select a point on the number line to plot a point that is equivalent to  $\frac{3}{4}$ .



8.

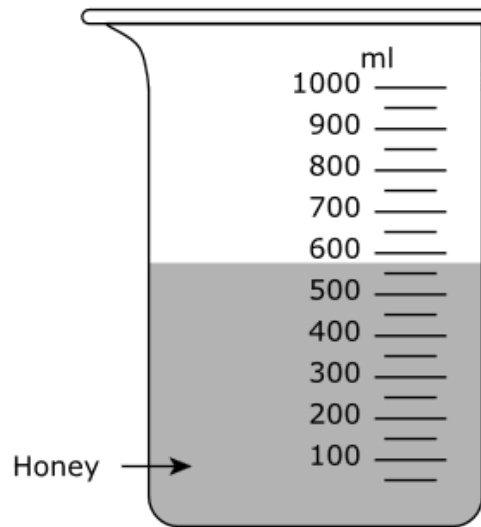
VF479832

Which **three** of these number facts are correct?

- A.  $4 \div 1 = 3$
- B.  $6 \div 2 = 3$
- C.  $2 \times 6 = 12$
- D.  $3 \times 4 = 14$
- E.  $5 \times 4 = 20$

**Part A**

What is the amount of honey in the measuring cup rounded to the nearest 100 milliliters (ml)?



Enter your answer in the box.

**Part B**

Jay needs 740 milliliters (ml) of honey to make banana bread. He has 290 ml. How many more milliliters of honey does Jay need?

- A. 300 ml
- B. 450 ml
- C. 550 ml
- D. 750 ml

10.

VF524248

Kyle spends a total of 47 minutes working in his garden. He spends 14 minutes planting vegetables and 19 minutes pulling weeds. He spends the rest of the time picking berries.

What is the amount of time that Kyle spends picking berries?

Enter your answer in the box.

11.

VF541130

Solve the equations and fill in the missing numbers.

Enter your answers in the boxes.

$3 \times 7 = \boxed{\phantom{00}}$

$40 \div 4 = \boxed{\phantom{00}}$

$6 \times 8 = \boxed{\phantom{00}}$

$64 \div 8 = \boxed{\phantom{00}}$

$27 \div 3 = \boxed{\phantom{00}}$

12.

M01418

Zara buys 5 packages of orange juice boxes and 5 packages of apple juice boxes. Each package of orange juice contains 6 boxes. There are a total of 80 juice boxes.

- Find the total number of apple juice boxes.
- What is the total number of apple juice boxes in each package?
- Show your work or explain your answers.

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



▼ Math symbols

+	-	×	÷
$\frac{\square}{\square}$	$\frac{\square}{\square}$	(.)	[ ]
=	<	>	≠
\$	°	?	

13.

M01737

Emma put stickers on her books.

- She had 8 books.
- She had 72 stickers.
- She put the same number of stickers on each book.

Which expression shows how to find the number of stickers she put on each book?

- A.  $72 + 8$
- B.  $72 - 8$
- C.  $72 \times 8$
- D.  $72 \div 8$

14.

M03618

What numbers are needed to make the equations true?

Enter your answers in the spaces provided. Enter **only** your answers.

$$\square \times 60 = 120$$

$$9 \times \square = 810$$

$$8 \times 70 = \square$$
















						
						
						



Figure 1 is a rectangle with two sides covered in tiles.



Figure 1

Which equation shows a way to find the area of Figure 1?

- A.  $5 \times 6 = 30$
- B.  $5 \times 7 = 35$
- C.  $6 \times 6 = 36$
- D.  $6 \times 7 = 42$

Bev has exactly 48 feet of ribbon. She cuts the ribbon into pieces that are each 6 feet long.

What is the total number of pieces of ribbon Bev has?

Enter your answer in the box.

What is the time shown on the clock?



- A. 11:09
- B. 11:11
- C. 11:14
- D. 11:16

18.

M00631

Which number will make the equation true?

Drag and drop the number into the box.



$$56 + \square = 8$$

19.

M00821

Jessica came home at 3:20 p.m. She worked on her homework for 24 minutes. After she finished her homework, she did her three chores.

- It took her 23 minutes to clean her room.
- It took her 8 minutes to feed the animals.
- It took her 10 minutes to set the table.

What time did she finish her homework? How long did it take her to finish her three chores? Show all your work.

Enter your answer and your work in the space provided.

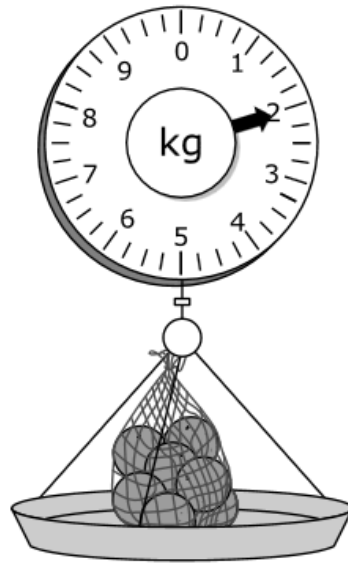


▼ Math symbols

+	-	×	÷
$\frac{\square}{\square}$	$\frac{\square}{\square}$	(·)	[·]
=	<	>	≠
\$	°	?	

**Part A**

Mr. Smith, the principal, placed a bag of oranges on the scale as shown.



Mr. Smith bought 60 bags of oranges for a school event. How many kilograms of oranges did he buy?

- A. 2 kilograms
- B. 62 kilograms
- C. 80 kilograms
- D. 120 kilograms

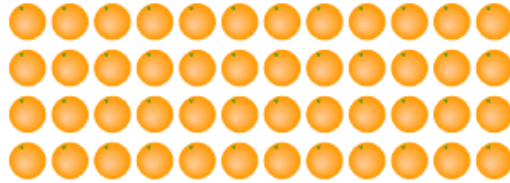
**Part B**

Mr. Smith bought 500 liters of juice for the event. After the event they had 29 liters of juice left over. How many liters of juice did they use at the event?

- A. 471 liters
- B. 481 liters
- C. 571 liters
- D. 581 liters

Karen has 48 oranges. She puts the oranges into grocery bags.

- Each bag has the same number of oranges.
- Each bag has more than 2 oranges.
- There were more than 4 bags.
- There were no oranges left over.



Drag and drop the numbers into the blanks to make an equation showing how to find the number of oranges Karen put into each bag.

+	-	×	÷
2	3	4	6
8	12	16	24
48			

$$48 \square \square = \square$$

Casey called her friend Linda on the telephone. The point on the number line shows the time the telephone call started.



### Part A

Casey began cleaning her room 45 minutes before she called Linda.

At what time did Casey begin cleaning her room? Use the number line to help explain your thinking.

Enter your answer and your explanation in the space provided.



Math symbols

+	-	×	÷
$\frac{\square}{\square}$	$\frac{\square}{\square}$	(·)	[ ]
=	<	>	≠
\$	°	?	

### Part B

Casey went to the library 30 minutes after her telephone call with Linda started.

At what time did Casey go to the library? Use the number line to help explain your thinking.

Enter your answer and your explanation in the space provided.



Math symbols

+	-	×	÷
$\frac{\square}{\square}$	$\frac{\square}{\square}$	(·)	[ ]
=	<	>	≠
\$	°	?	

23.

VF556095

Select the **two** equations that are correct.

A.  $\frac{1}{6} = \frac{3}{8}$

B.  $\frac{2}{3} = \frac{4}{6}$

C.  $\frac{3}{4} = \frac{7}{8}$

D.  $\frac{4}{8} = \frac{1}{2}$

E.  $\frac{5}{6} = \frac{5}{8}$

24.

M00368

Select the correct title for the three shapes shown. Drag and drop the correct title into the box.



<b>Quadrilaterals</b> Shapes with exactly 4 sides	<b>Triangles</b> Shapes with exactly 3 angles
<b>Triangles</b> Shapes with exactly 3 angles	<b>Quadrilaterals</b> Shapes with exactly 4 sides

25.

M03179

Two pairs of fractions are shown. Which symbol correctly compares each pair of fractions?

Drag and drop the symbol that correctly compares each pair of fractions into each box.



$$\frac{5}{6} \quad \boxed{\phantom{<}} \quad \frac{5}{8} \qquad \frac{3}{4} \quad \boxed{\phantom{<}} \quad \frac{1}{4}$$

26.

VH003077

Sean will put a border around a rectangular place mat that has a perimeter of 26 inches.

What is the missing length of the side of the place mat?

Enter your answer in the box.



The table shows the numbers of different types of animals a park ranger counted in a park.

### Park Animal Count

Type of Animal	Number of Animals
Deer	18
Fox	13
Raccoon	29
Squirrel	32

### Part A

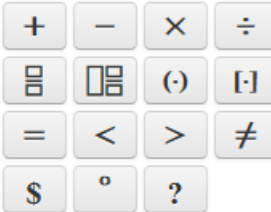
Nicole says there are 722 animals in the park because  $1 + 1 + 2 + 3 = 7$  and  $8 + 3 = 11$ ,  $9 + 2 = 11$ , and  $11 + 11 = 22$ .

Explain the error that Nicole made. Then write the total number of animals counted in the park.

Enter your explanation and your answer in the space provided.



▼ Math symbols



### Part B

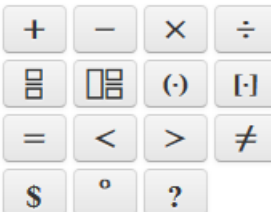
Nicole says there are 21 more squirrels than foxes counted in the park because  $30 - 10 = 20$  and  $3 - 2 = 1$ .

Explain the error Nicole made. Then write how many more squirrels than foxes were counted in the park.

Enter your explanation and your answer in the space provided.



▼ Math symbols





Which word problems can be solved using the expression  $9 \times 6$ ?

Select the **three** correct answers.

- A. Luke runs for 9 minutes each day. How many minutes will Luke run in 6 days?
- B. It takes Carl 9 minutes to bake one pizza. How many minutes will it take Carl to bake 6 pizzas separately?
- C. Jackson has 9 white T-shirts and 6 colored T-shirts. What is the total number of T-shirts Jackson has?
- D. Mara has 9 feet of ribbon to share equally with 6 friends. How many feet of ribbon will each friend get?
- E. Kelly finds 9 shells on the beach. He gives 6 shells to his brother. How many shells does Kelly have remaining?
- F. Miss Harris sets up 9 rows of chairs. Each row has 6 chairs. What is the total number of chairs Miss Harris sets up?

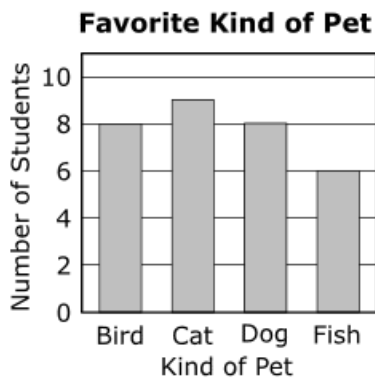
The table shows the favorite kind of pet of 30 students.

**Favorite Kind of Pet**

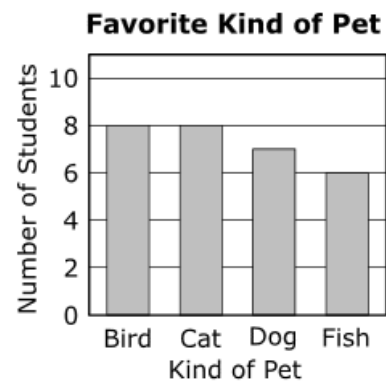
Kind of Pet	Number of Students
Bird	8
Cat	6
Dog	9
Fish	7

Which bar graph shows the same data as the table?

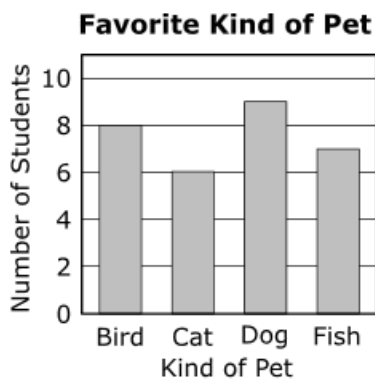
A.



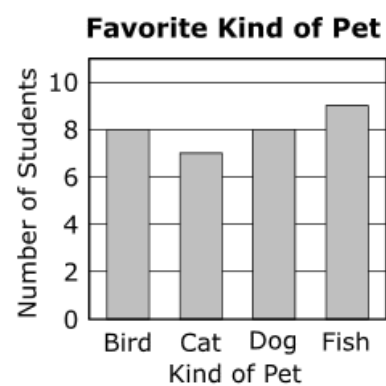
C.



B.



D.



Damian wrote a sentence using the fractions  $\frac{2}{3}$  and  $\frac{2}{6}$ .

“The numerators of  $\frac{2}{3}$  and  $\frac{2}{6}$  are equal, so the fractions are equal.”

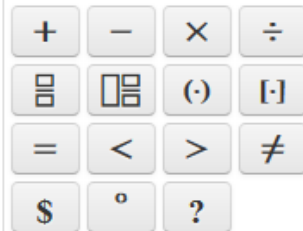
Damian is incorrect in his reasoning.

- Explain why Damian is incorrect in his reasoning about numerators.
- Write a correct comparison for  $\frac{2}{3}$  and  $\frac{2}{6}$  using  $<$  or  $>$ .
- Explain why your reasoning is correct.

Enter your answer and your explanations in the space provided.



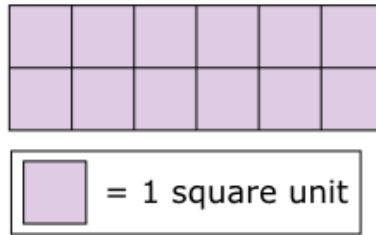
▼ Math symbols



What is  $6 \times 90$ ?

- A. 480
- B. 540
- C. 560
- D. 630

Kevin drew this figure.

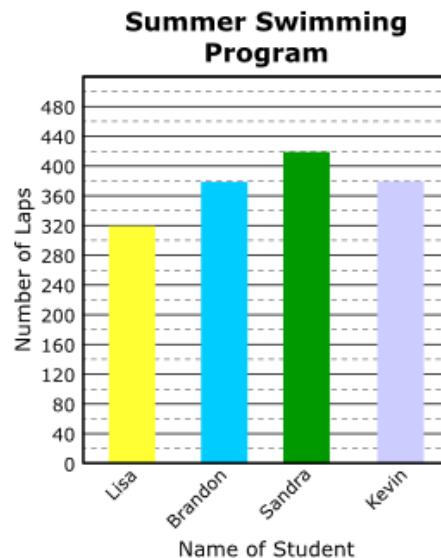


What is the area, in square units, of the figure that Kevin drew?

Enter your answer in the box.

square units

This bar graph shows the numbers of laps four students swam during a summer swimming program.



### Part A

How many fewer laps did Kevin and Lisa swim than Brandon and Sandra?

Enter your answer in the box.

laps

### Part B

How many more laps did Brandon and Kevin swim together than Sandra?

Enter your answer in the box.

laps

**34.****M02431**

Which number sentences have a quotient of 4?

Select the **three** correct answers.

A.  $24 \div 6 = \square$

B.  $15 \div 3 = \square$

C.  $6 \div 2 = \square$

D.  $8 \div 2 = \square$

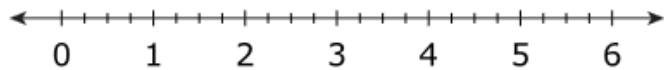
E.  $3 \div 1 = \square$

F.  $12 \div 3 = \square$

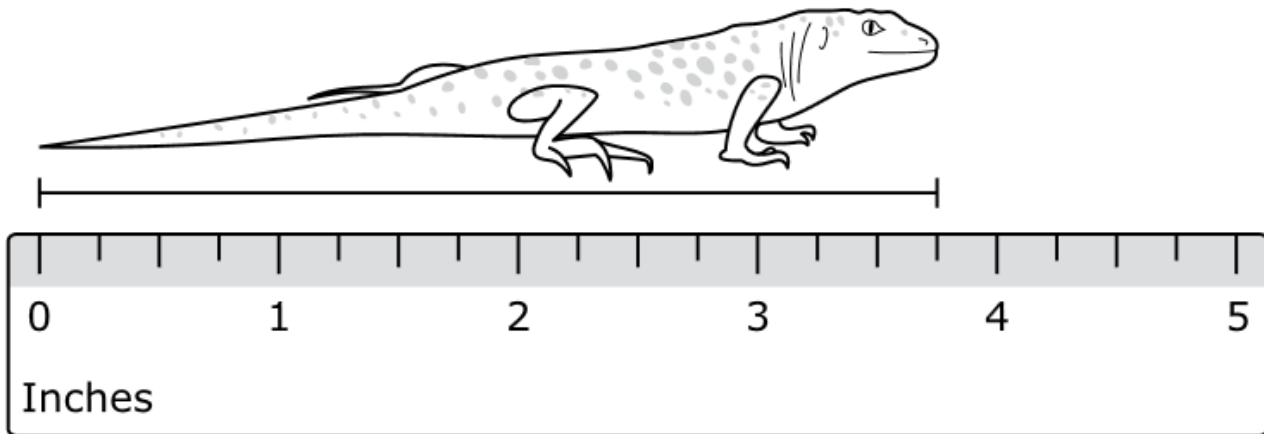
**35.****VF885879**

This number line shows whole numbers from 0 to 6.

Select a place on the number line to plot  $\frac{6}{8}$ .



Brandi measures the length of a lizard as shown.



What is the length of the lizard?

- A.  $3\frac{1}{4}$  inches
- B.  $3\frac{1}{2}$  inches
- C.  $3\frac{3}{4}$  inches
- D. 4 inches