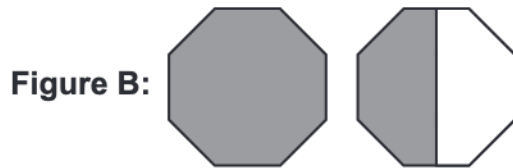


1 What is the value of 7×8 ?

- (A) 49 (C) 58
(B) 56 (D) 64

2 Figure A shows $\frac{1}{4}$ of the whole shaded.



Which fraction of the whole is shaded in Figure B?

- (A) $\frac{1}{6}$ (C) $\frac{6}{1}$
(B) $\frac{4}{6}$ (D) $\frac{6}{4}$

3 What is the unknown number in the equation?

$$4 = \square \div 7$$

4 Millicent shovels snow in the morning, afternoon, and evening.

Fill in the missing start time, end time, and time spent shoveling in the table.

	Start Time	End Time	Time Spent Shoveling
Morning	6:54 a.m.	:	20 minutes
Afternoon	:	3:45 p.m.	16 minutes
Evening	7:48 p.m.	8:01 p.m.	minutes

5 A school receives a shipment of 9 boxes of textbooks. Each box contains 8 textbooks. The school expects to receive a total of 110 textbooks. How many more textbooks are missing from the shipment?

- (A) 38 (C) 72
(B) 48 (D) 93

6 What is the value of $591 - 188$?

7 Marisol has 54 marbles. She places an equal number of marbles in each of 6 cups. She then gives 3 of the cups to her friend. How many marbles does she give to her friend?

- (A) 12 (C) 36
(B) 27 (D) 51

8 Gino’s school is open for 19 days in January. The school is open for 15 days in February. In March the school is open for 7 more days than in February.

Draw a bar graph to show the correct number of days the school is open each month.



9 A fraction model for $\frac{2}{3}$ is shown.



Kerri claims that an equivalent fraction is $\frac{4}{6}$. Which statement describes whether she is correct?

- (A) Yes, because splitting each part of the model into 2 pieces shows equivalence.
(B) Yes, because splitting each part of the model into 3 pieces shows equivalence.
(C) No, because $\frac{2}{3}$ and $\frac{4}{6}$ will have different numbers of shaded parts.
(D) No, because $\frac{2}{3}$ and $\frac{4}{6}$ will have different numbers of total parts.

10 Write a multiplication equation that can be used to solve $42 \div 6 = \square$.

_____ \times _____ = 42

- 11** Which statement is true about the multiplication table?

×	0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10
2	0	2	4	6	8	10	12	14	16	18	20
3	0	3	6	9	12	15	18	21	24	27	30
4	0	4	8	12	16	20	24	28	32	36	40

- (A) Every other row will have only odd numbers because in the odd-numbered rows any number times an odd number will always be an odd number.
- (B) Every other row will have only odd numbers because in the odd-numbered rows an odd number times an odd number will always be an odd number.
- (C) Every other row will have only even numbers because in the even-numbered rows any number times an even number will always be an even number.
- (D) Every other row will have only even numbers because in the even-numbered rows an even number times an even number will always be an even number.

- 12** A rectangle has a width of 4 inches and a length of 9 inches. Which of these rectangles has the same perimeter but a smaller area than the rectangle described?

- (A) a rectangle with a width of 5 inches and a length of 8 inches
- (B) a rectangle with a width of 6 inches and a length of 6 inches
- (C) a rectangle with a width of 9 inches and a length of 4 inches
- (D) a rectangle with a width of 10 inches and a length of 3 inches

- 13** Nathan has 12 oranges. He places the oranges into 3 bags so that each bag has the same number of oranges.

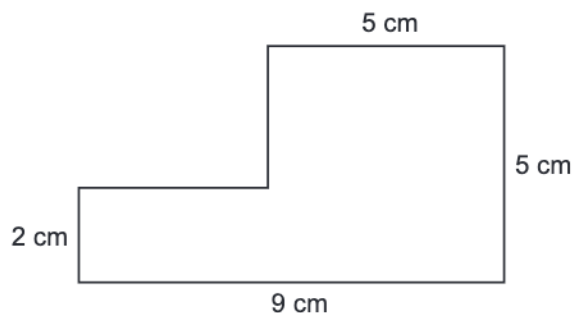
Complete an equation to show the number of oranges in each bag.

Fill in the blanks with the correct answers from the list.

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

2	3	4	6	12
---	---	---	---	----

- 14** Alison says that the area of the figure can be found using $5 \times 5 + 2 \times 9$.



Which of these statements explains whether Alison is correct?

- (A) Alison is correct, so the area is 43 square centimeters.
- (B) Alison is incorrect because she counted the overlapping area twice.
- (C) Alison is incorrect because she should have added the side lengths of each rectangle, not multiplied them together.
- (D) Alison is incorrect because she should have multiplied the areas of the two rectangles together, not added them together.

- 15** The table shows the number of students in each of four schools.

School	Number of Students
School A	337
School B	451
School C	345
School D	418

Part A

Round the number of students in each school to the nearest ten.

Fill in the blanks in the table with the correct answers.

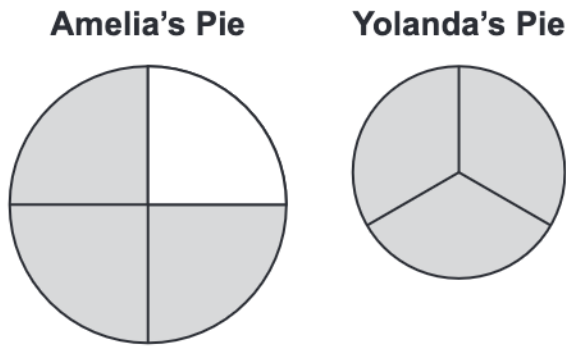
School	Number of Students	Number of Students Rounded to Nearest Ten
School A	337	
School B	451	
School C	345	
School D	418	

Part B

Which school has a number of students that rounds to 400 when rounded to the nearest hundred?

- (A) School A (C) School C
- (B) School B (D) School D

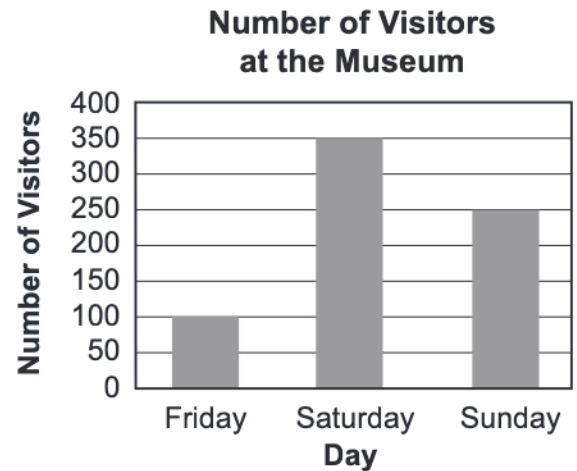
- 16** Amelia's family eats $\frac{3}{4}$ of a pie. Yolanda's family eats $\frac{3}{3}$ of a different pie.



Which statement is true?

- (A) Amelia's family must have eaten a larger amount of pie because $\frac{3}{3} < \frac{3}{4}$.
- (B) Yolanda's family must have eaten a larger amount of pie because $\frac{3}{4} < \frac{3}{3}$.
- (C) The amount of pie eaten by the two families cannot be compared because the denominators are different.
- (D) The amount of pie eaten by the two families cannot be compared because the fractions refer to different wholes.

- 17** The bar graph shows the number of visitors at a museum on Friday, Saturday, and Sunday.



How many more visitors does the museum have on Saturday and Sunday than on Friday?

- (A) 200
- (B) 500
- (C) 600
- (D) 700

- 18** Leah has some baskets of apples. She has 27 apples in all. Each basket has 9 apples in it. How many baskets of apples does Leah have?

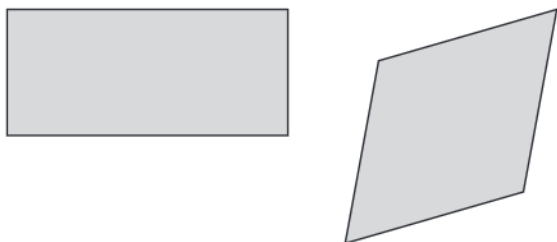
Fill in the blanks with the correct answers to complete the equation.

_____ \div _____ = _____ baskets of apples

19 Select **all** the expressions that have the same product as 4×60 .

- (A) 3×40
- (B) 80×4
- (C) 24×1
- (D) 8×30
- (E) 6×40

20 A rectangle and a rhombus are shown.



Select **all** the attributes these shapes always have in common.

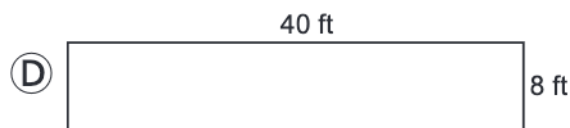
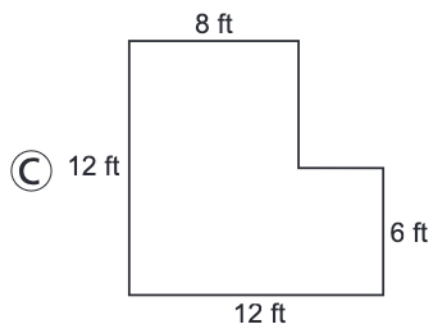
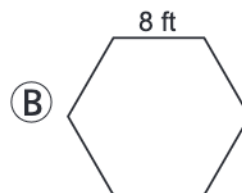
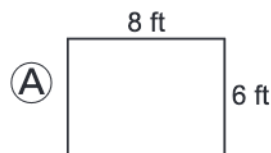
- (A) number of angles
- (B) number of sides
- (C) number of parallel sides
- (D) number of acute angles
- (E) number of right angles

21 Which expression is equivalent to 9×8 ?

- (A) $(9 \times 5) + (9 \times 4)$
- (B) $(9 \times 5) + (9 \times 3)$
- (C) $(9 + 8) \times (9 + 1)$
- (D) $(4 \times 5) + (4 \times 4)$

22 Lori's bedroom has a perimeter of 48 feet.

Select **all** the shapes that could represent her bedroom.



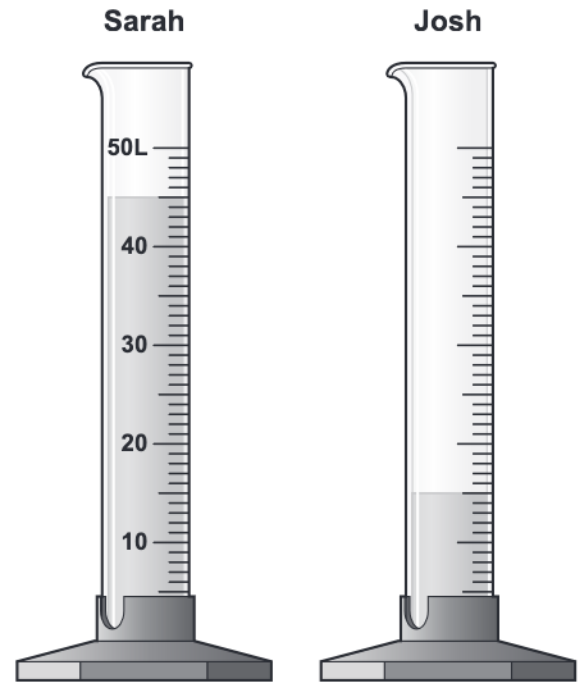
- 23** A multiplication table is shown.

×	0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10
2	0	2	4	6	8	10	12	14	16	18	20
3	0	3	6	9	12	15	18	21	24	27	30
4	0	4	8	12	16	20	24	28	32	36	40
5	0	5	10	15	20	25	30	35	40	45	50
6	0	6	12	18	24	30	36	42	48	54	60
7	0	7	14	21	28	35	42	49	56	63	70
8	0	8	16	24	32	40	48	56	64	72	80
9	0	9	18	27	36	45	54	63	72	81	90
10	0	10	20	30	40	50	60	70	80	90	100

Which statement correctly describes how to find the multiples of 4 in the multiplication table?

- (A) Find all the numbers that start with 4.
- (B) Find all the numbers that end with 4.
- (C) Find all the shaded numbers that would meet at an unshaded 4.
- (D) Find all the numbers in the same row or column as a shaded 4.

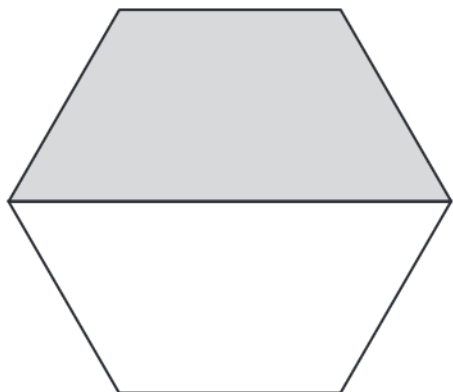
- 24** Sarah and Josh have the same size containers, as shown.



Sarah has 45 liters (L) of water in her container. Josh does not know how much water is in his container. About how much more water in liters does Sarah have than Josh?

_____ liters

- 25** The shaded part represents $\frac{1}{2}$.



How many same-sized parts should be put together to make $\frac{8}{2}$?

- (A) 2 (C) 8
(B) 4 (D) 10

- 26** Anna has 4 vases. Each vase has 8 flowers in it. How many flowers does Anna have?

- (A) 2 (C) 12
(B) 4 (D) 32

- 27** Shade the model to show a fraction of the whole that makes the inequality true.

$$\frac{1}{2} < \square < \frac{3}{4}$$

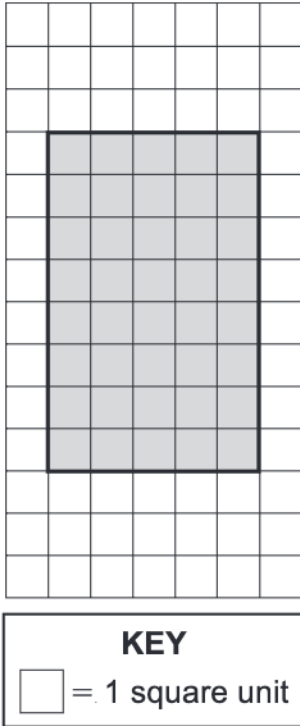


- 28** Which number will make both of these equations true?

$$3 \times \underline{\hspace{2cm}} = 15$$

$$15 \div 3 = \underline{\hspace{2cm}}$$

- 29** The students in Ms. Kelly's class are creating a reading space for the classroom. They draw this model of the space.

**Part A**

Write an equation to find the area of the reading space.

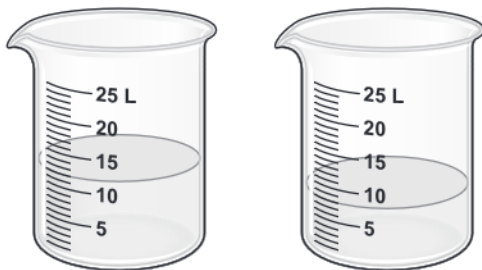
Part B

Ms. Kelly decides to make another space in the classroom for art supplies. It will be half the area of the reading space. Which of these are possible dimensions?

Select the **two** correct answers.

- Ⓐ 4×5 Ⓓ 2×40
 Ⓑ 2×10 Ⓔ 4×8
 Ⓒ 8×5

- 30** Shawna and Nicky have different amounts of liquid, as shown.



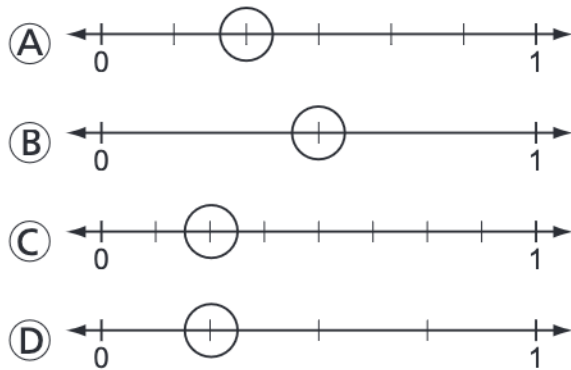
They both pour their liquid into a bigger container. What is the volume of liquid in the bigger container?

- Ⓐ 4 L Ⓑ 8 L Ⓒ 12 L Ⓓ 20 L

- 31** Logan has a box for marbles. It is divided into 6 equal parts, as shown.

red	red	blue
purple	pink	orange

Which number line shows the part of the box that is filled with red marbles?



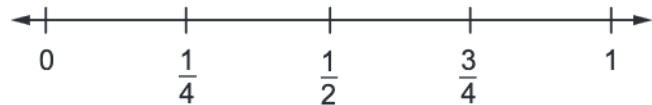
- 32** Amit measured the size of several beads. The widths are shown in the table.

Bead Width (in inches)

Bead 1	$\frac{1}{2}$
Bead 2	$\frac{1}{4}$
Bead 3	$\frac{3}{4}$
Bead 4	1
Bead 5	$\frac{1}{4}$
Bead 6	$\frac{3}{4}$

Draw Xs on the line plot to represent all 6 bead widths in the table.

Bead Width (in inches)



- 33** Ms. Potter is making her famous chili for a fundraiser. She makes 8 pounds of chili. Then she gets a call that the fundraiser needs 3 times as much chili. She wants to put equal amounts of chili into 6 containers. How many pounds of chili will be in each container?

_____ pounds