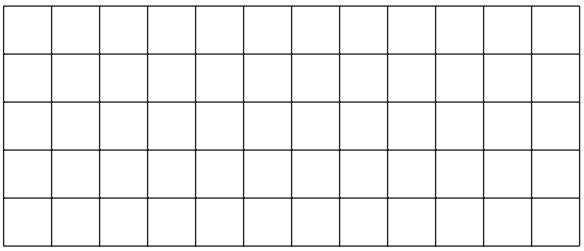
Putting It All Together: End-of-Course Assessment and Resources

1. Select **all** expressions that represent the area of the rectangle.



A. 12×5

B. $10 \times 5 + 2 \times 5$

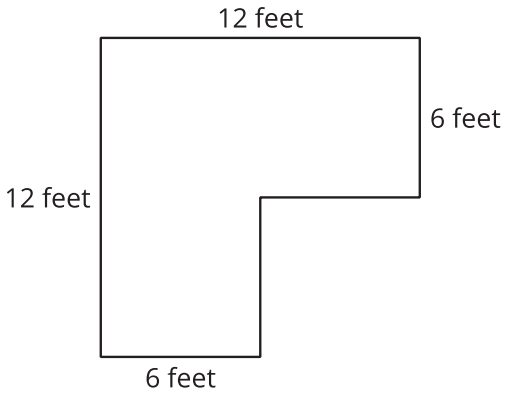
C. $5 \times 10 - 5 \times 2$

D. $12 + 5 + 12 + 5$

E. $12 \times 3 + 12 \times 2$

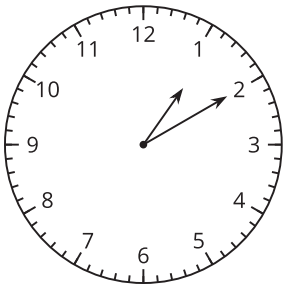
2. Here is a diagram of a patio.

What is the area of the patio? Explain or show your reasoning.

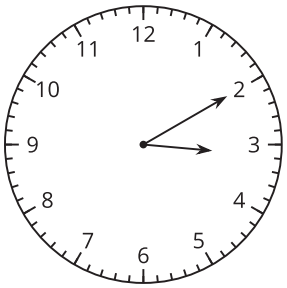


3. Soccer practice began at 2:45 p.m. and lasted 95 minutes. Which clock shows the time when soccer practice ended?

A.



B.



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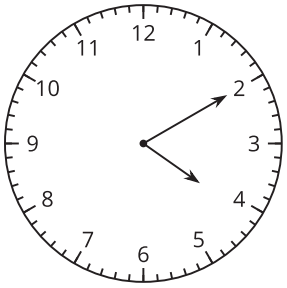

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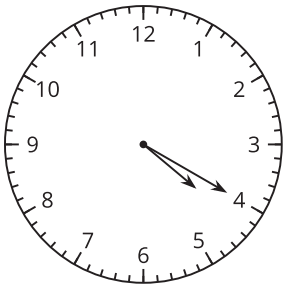


4. Seven bags of dog food weigh 63 kilograms. If all the bags have the same weight, how many kilograms does each bag of dog food weigh?

   a. Write an equation to represent the situation. Use a letter or symbol for the unknown.

   b. Solve the problem.

5. a. Think of a situation that the equation $5 \times 3 = ?$ could represent. Describe or show what the 5, 3, and "?" represent. Draw a diagram if it helps to show your thinking.

   b. Think of a situation that the equation $36 \div 4 = ?$ could represent. Describe or show what the 36, 4, and "?" represent. Draw a diagram if it helps to show your thinking.

6. There are 60 books on 5 shelves. There are the same number of books on each shelf. How many books are on each shelf?

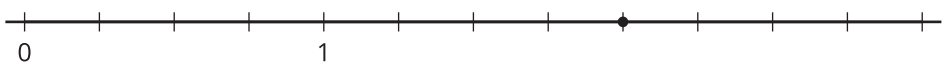
   a. Write a multiplication equation to represent the situation. Use a "?" for the unknown.

   b. Write a division equation to represent the situation. Use a "?" for the unknown.

   c. Find how many books are on each shelf. Explain or show your reasoning.

7. A farmer brought 525 oranges to the market. She sold 8 boxes of 12 oranges. How many oranges does she have now? Show your reasoning.

8. Select **all** numbers that represent the point on the number line.



A. 2

B. $\frac{7}{4}$

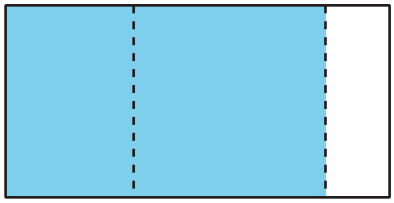
C. $\frac{8}{4}$

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

E. 8

9. Select **all** diagrams that show $\frac{2}{3}$ or an equivalent fraction of the rectangle shaded.

A.



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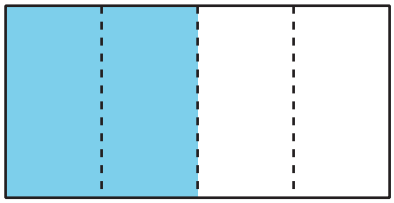
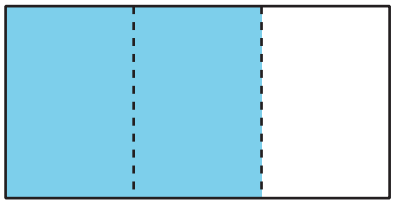
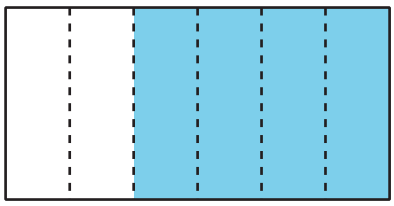


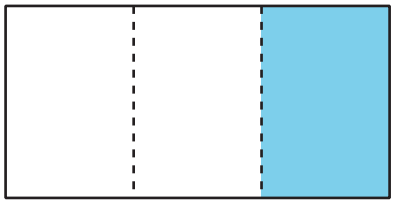
C.



D.

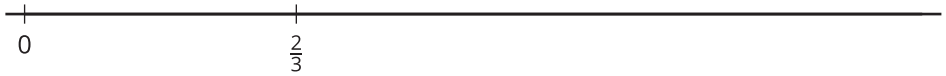


E.



10. a. Locate and label $\frac{1}{4}$ and $\frac{5}{4}$ on the number line. Explain your reasoning.

b. Locate and label 1 on the number line. Explain your reasoning.



11. a. Find the value of 5×2, 5×4, and 5×6.

b. Why is the last digit of an even number multiplied by 5 always 0?

12. Write <, =, or > in each blank to make the statement true. Explain your reasoning.

a. $\frac{3}{6}$ _____ $\frac{3}{8}$

b. $\frac{3}{6}$ _____ $\frac{1}{2}$

c. $\frac{3}{6}$ _____ $\frac{2}{6}$

13. Find the value of each expression.

a. 14×7

b. 3×26

c. 37×2

d. $42 \div 3$

e. $85 \div 5$

f. $90 \div 9$

14. Find two ways to write each number as a product of two factors. Record each way as an equation.

a. i. 16

ii. 18

iii. 24

b. i. 30

ii. 36

iii. 60

c. i. 72

ii. 98

iii. 96

15. Lin's class is designing a garden at school. Their garden is a rectangle that is 8 feet by 12 feet. The table shows how far some different plants need on all sides to grow well.

plant	space on all sides
tomato	2 feet
lettuce	1 foot
onion	$\frac{1}{2}$ foot
carrot	$\frac{1}{6}$ foot
pumpkin	5 feet

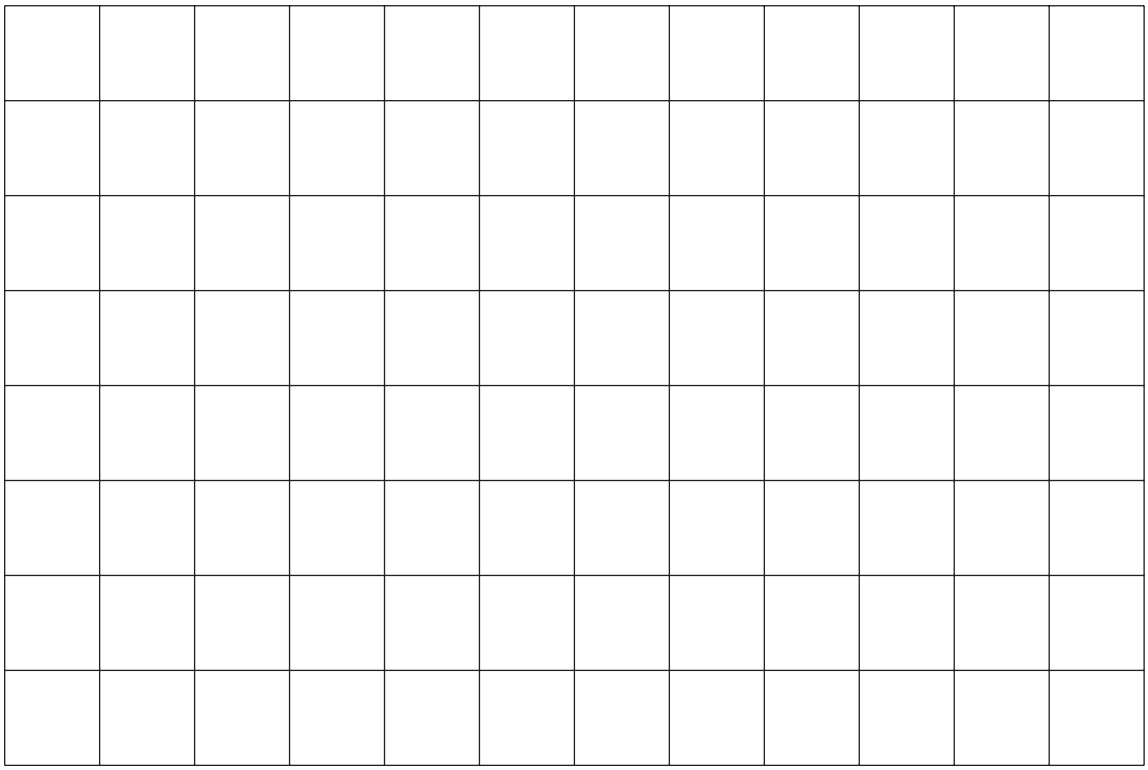
a. Which plant takes up the most amount of space? Which plant takes up the least amount of space?

b. Andre wants to plant pumpkins. Lin says that there is not enough room. Do you agree with Lin? Explain or show your reasoning.

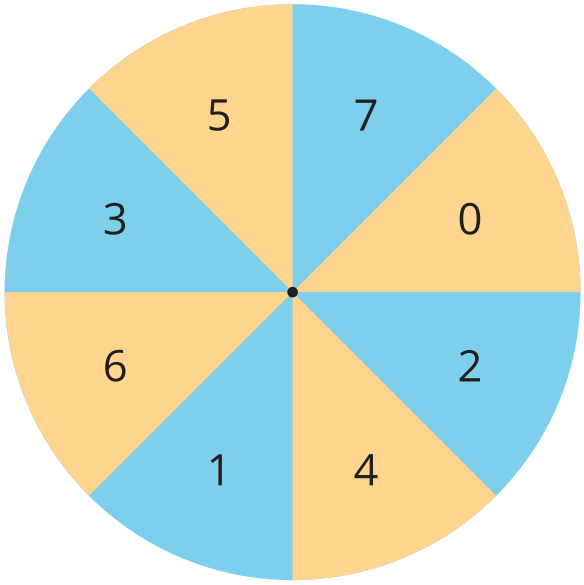
c. How many lettuce plants can the class fit in the garden? Explain or show your reasoning.

d. Design your own garden. Make sure to:

- choose at least 3 different kinds of plants
- give each plant enough space to grow
- fit as many of the plants as you can in the garden



16. a. Spin the spinner 6 times and record the digits.



Use them to write a pair of three-digit numbers that make the largest sum possible without going over 1,000. (You can place the digits you get in any order.)

_____ _____ _____ and _____ _____ _____

b. Spin the spinner 6 more times and record the digits.

Use them to write a pair of three-digit numbers that make the smallest difference possible. (You can place the digits you get in any order.)

_____ _____ _____ and _____ _____ _____

17. a. Write a division equation for each situation. Use "?" for the unknown quantity.

i. There are 35 students in the room. They are seated at 7 tables, with the same number of students at each table. How many students are at each table?

ii. There are 35 students in the room. There are 7 students seated at each table. How many tables of students are there?

b. How are the situations the same? How are they different?