

Course 1 Benchmark Test – Second Quarter

1. Raul is making a scale model of an airplane that has a wingspan of 44 feet.

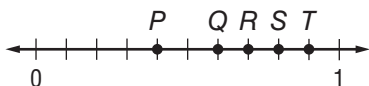
If Raul's scale model is $\frac{1}{16}$ the size of the actual airplane, what is the wingspan of his model?

- A. 704 ft
- B. 60 ft
- *C. $2\frac{3}{4}$ ft
- D. $1\frac{2}{3}$ ft

2. Two-thirds of the students in Hannah's homeroom plan to do some volunteering this summer. Of these students, $\frac{3}{5}$ plan to volunteer at the community center. What fraction of the students in Hannah's homeroom plan to volunteer at the community center this summer?

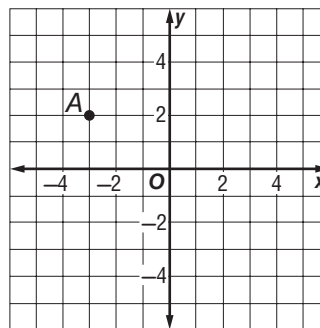
- F. $\frac{2}{3}$
- G. $\frac{3}{5}$
- *H. $\frac{2}{5}$
- I. $\frac{1}{15}$

3. **SHORT ANSWER** Which point on the number line is closest to the product of the numbers graphed at points *R* and *T*? Explain your answer.



point Q; Point $R = \frac{7}{10}$ and Point $T = \frac{9}{10}$. $\frac{7}{10} \cdot \frac{9}{10} = \frac{63}{100}$ and $\frac{63}{100} \approx \frac{6}{10}$, point Q.

4. In which quadrant does point A lie on the coordinate plane?



- A. I
- *B. II
- C. III
- D. IV

5. Which of the following integers has the greatest absolute value?

- F. 0
- G. 7
- *H. -10
- I. 1

6. The Panthers football team lost 4 yards on each of their first two plays of the game. Which of the following integers represents the progress of the team after the first two plays?

- *A. -8
- B. -4
- C. 4
- D. 8

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7. The table shows the record low temperatures of four different towns. Which of the following shows the record temperatures ordered from least to greatest?

Record Low Temperatures	
Town	Temperature (°F)
Oakmont	-7
Cherry Grove	3
Anderson Hills	11
Glentown	-2

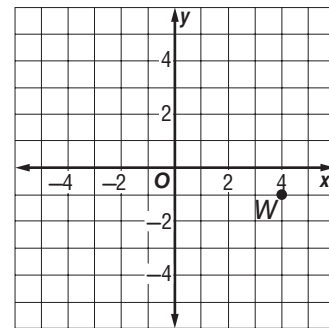
- F. 11, 3, -2, -7
- G. -2, 3, -7, 11
- H. -2, -7, 3, 11
- *I. -7, -2, 3, 11
8. Which of the following expressions correctly uses exponents to show the prime factorization of 360?
- A. $2^4 \times 3^2 \times 5$
- *B. $2^3 \times 3^2 \times 5$
- C. $2^4 \times 3 \times 5$
- D. $2^3 \times 3 \times 5^2$
9. The expression $\frac{d}{t}$ can be used to find the average speed of an object that travels a distance d in time t . What is a car's average speed if it travels 145 miles in 2.5 hours?

- *F. 58 miles per hour
- G. 62 miles per hour
- H. 65 miles per hour
- I. 362.5 miles per hour

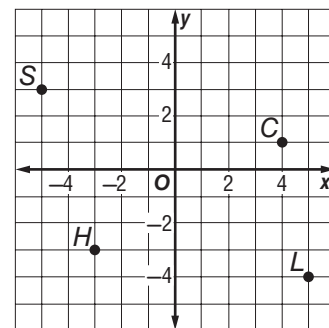
10. Which of the following expressions is equivalent to $6(5 + 3x)$?

- A. $30 + 3x$
- B. $11 + 9x$
- *C. $30 + 18x$
- D. $11 + 3x$

11. **SHORT ANSWER** Graph and label point $W(4, -1)$ on the coordinate plane.



12. What are the coordinates of the point in Quadrant IV on the coordinate plane?



- F. (4, 1)
- G. (1, 4)
- H. (-4, 5)
- *I. (5, -4)

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13. Which of the following rational numbers represents a repeating decimal?

- *A. $\frac{25}{48}$
- B. $\frac{11}{40}$
- C. $\frac{7}{32}$
- D. $\frac{3}{25}$

14. The top students in a distance throwing competition are shown in the table. How many yards did the winner of the competition throw the ball?

Distance Throwing Competition	
Student	Distance (ft)
Ashley	162
Craig	156
Fernando	175
Robert	166

- F. 525 yards
- G. 468 yards
- *H. $58\frac{1}{3}$ yards
- I. 52 yards

15. **SHORT ANSWER** Define a variable and write an expression to represent the following phrase.

seven years younger than Lisa

Let a represent Lisa's age; $a - 7$

16. Mrs. Rome has $\frac{2}{3}$ of a pan of lasagna left after dinner. She wants to divide the leftover lasagna into 4 equal servings. What fraction of the original pan does each serving represent?

- A. $\frac{1}{12}$
- *B. $\frac{1}{6}$
- C. $\frac{1}{4}$
- D. $\frac{3}{8}$

17. Jeff is making fruit punch for the school dance. He needs $3\frac{3}{4}$ cups of pineapple juice per batch. If Jeff wants to make $4\frac{1}{2}$ batches of punch, how many cups of pineapple juice will he need?

- F. $8\frac{1}{4}$ cups
- G. $12\frac{3}{8}$ cups
- H. $15\frac{1}{2}$ cups
- *I. $16\frac{7}{8}$ cups

18. Which of the following symbols, when placed in the blank, makes the number sentence true?

$$\frac{11}{12} \text{ _____ } 0.916666\dots$$

- A. +
- *B. =
- C. <
- D. >

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- 19. SHORT ANSWER** A kindergarten teacher has $22\frac{1}{2}$ cups of juice to be divided equally among her students. If each student is to receive $1\frac{1}{4}$ cups of juice, how many students are there?

18 students

- 20.** A plumber has 28 feet of PVC pipe that he wants to cut into sections that are $2\frac{1}{3}$ feet long. How many sections of pipe will the plumber have in all?

F. $14\frac{1}{3}$ sections

G. $13\frac{1}{2}$ sections

***H.** 12 sections

I. 11 sections

- 21.** Which property is represented by the equation below?

$$\frac{2}{3} \times \frac{3}{2} = 1$$

***A.** Multiplicative Inverse Property

B. Multiplicative Identity Property

C. Distributive Property

D. Commutative Property of Multiplication

- 22.** Alexandria is evaluating the expression below.

$$3 \times 8 \div 2 + (4 - 1)^2$$

Which operation should be performed first according to the order of operations?

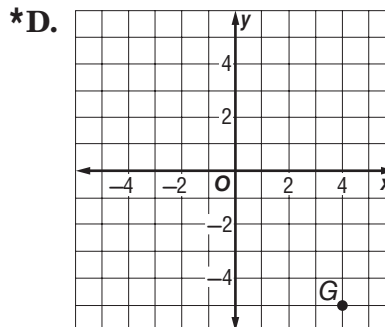
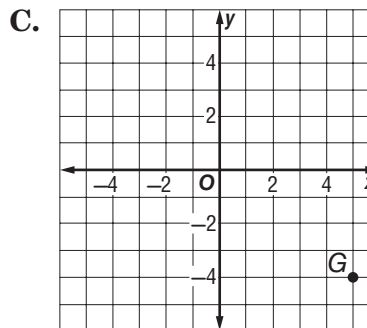
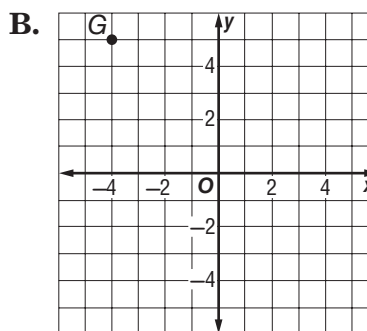
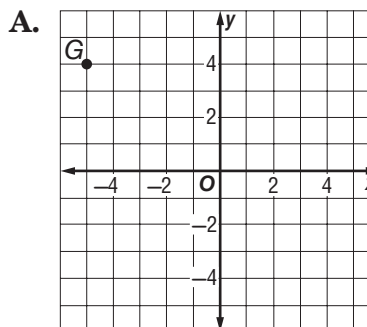
F. Multiply 3 and 8.

G. Divide 8 by 2.

***H.** Subtract 1 from 4.

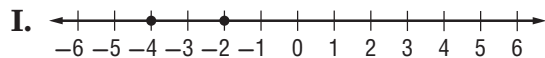
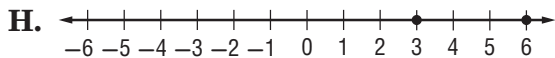
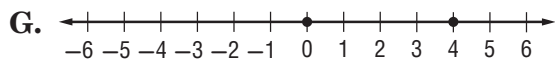
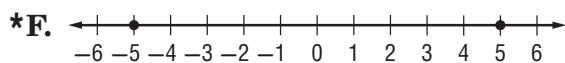
I. Evaluate the power.

- 23.** Which of the following coordinate planes correctly shows point $G(4, -5)$ graphed?



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24. Which number line shows two different integers with the same absolute value?



25. **SHORT ANSWER** Use the Distributive Property to write a numerical expression that is equivalent to $25 + 10$.
 $5(5 + 2)$