



Name _____ Date _____

8th Grade Tier 3 Screener - Fall Answer Key

Questions 1-3: Evaluate the expression.

1.

$$3 \times (2 + 5)$$

Answer: 21

2.

$$8 - (4 - 1)$$

Answer: 5

3.

$$(6 - 2) \times (3 + 4)$$

Answer: 28



Please stop, put your pencil down and wait for the next directions.

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(continued)

Questions 4-6: Multiply the multi-digit numbers.

4.

$$\begin{array}{r} 3628 \\ \times \quad 4 \\ \hline \end{array}$$

Answer: 14512

5.

$$\begin{array}{r} 57 \\ \times 26 \\ \hline \end{array}$$

Answer: 1482

6.

$$\begin{array}{r} 724 \\ \times 15 \\ \hline \end{array}$$

Answer: 10860



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(continued)

Questions 7-9: Divide the multi-digit numbers.

7.

$$6 \overline{)2,304}$$

Answer: 384

8.

$$3 \overline{)7,551}$$

Answer: 2517

9.

$$14 \overline{)2,492}$$

Answer: 178



Please stop, put your pencil down and wait for the next directions.

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(continued)

Questions 10-12: Add and subtract the mixed numbers.

10.

$$\begin{array}{r} 2\frac{3}{4} \\ + 1\frac{3}{5} \\ \hline \end{array}$$

Answer: 4 $\frac{7}{20}$

11.

$$\begin{array}{r} 7 \\ - 2\frac{3}{5} \\ \hline \end{array}$$

Answer: 4 $\frac{2}{5}$

12.

$$\begin{array}{r} 8\frac{2}{5} \\ - 3\frac{1}{2} \\ \hline \end{array}$$

Answer: 4 $\frac{9}{10}$



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Questions 13-15: Multiply the fractions.

13.

$$\frac{1}{3} \times \frac{2}{5}$$

Answer: $\frac{2}{15}$

14.

$$\frac{7}{8} \times \frac{3}{5}$$

Answer: $\frac{21}{40}$

15.

$$\frac{3}{4} \times \frac{2}{7}$$

Answer: $\frac{3}{14}$



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Questions 16-18: Divide the fractions by whole numbers.

16.

$$\frac{1}{9} \div 3$$

Answer: $\frac{1}{27}$

17.

$$\frac{1}{4} \div 8$$

Answer: $\frac{1}{32}$

18.

$$\frac{1}{10} \div 2$$

Answer: $\frac{1}{20}$



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Questions 19-21: Write the answer to each division problem.

19.

$$6 \div \frac{1}{4}$$

Answer: 24

20.

$$8 \div \frac{1}{2}$$

Answer: 16

21.

$$7 \div \frac{1}{4}$$

Answer: 28/1



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Questions 22-24: Multiply and divide fractions.

22.

$$\frac{2}{3} \times \frac{5}{6}$$

Answer: 5/9

23.

$$\frac{3}{4} \div \frac{5}{7}$$

Answer: 21/20

24.

$$\frac{7}{8} \div \frac{1}{2}$$

Answer: 7/4



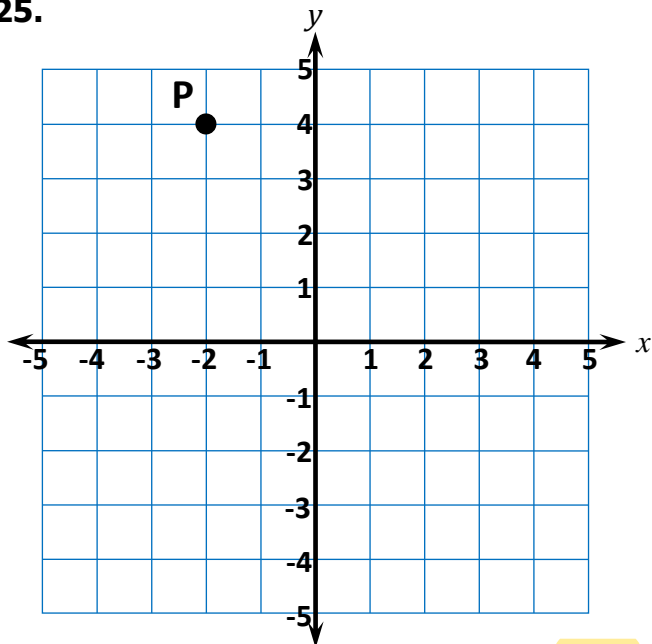
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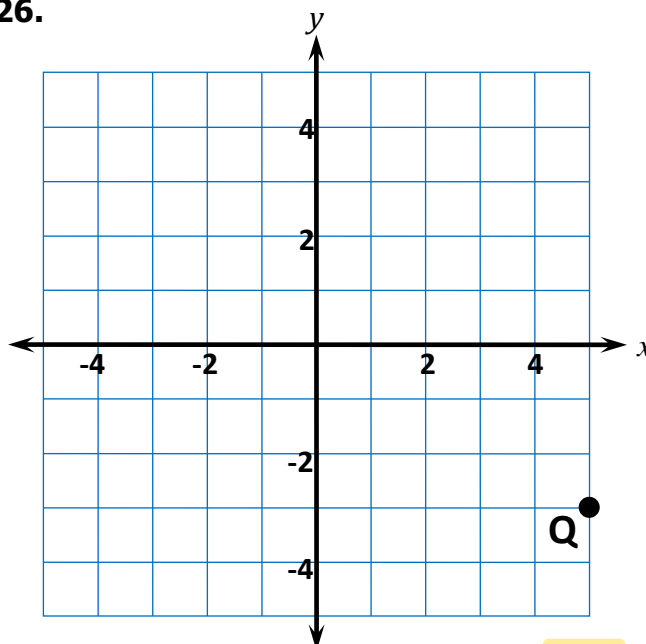
Questions 25-27: Write the ordered pair for the point.

25.



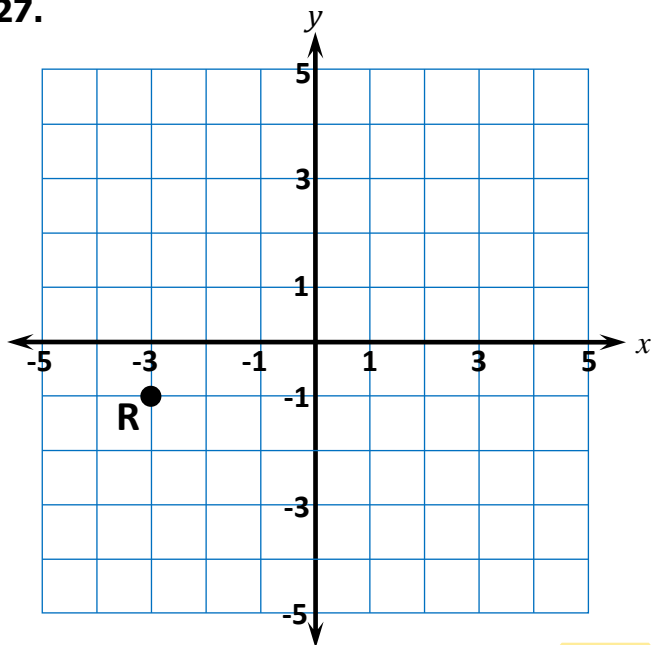
$P = (-2, 4)$

26.



$Q = (5, -3)$

27.



$R = (-3, -1)$

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Questions 28-30: Find the equivalent expression.

28.

The product of x and 5, plus 2

- $2x + 5$
 $5(x + 2)$
 $5x + 2$
 $x + 5 + 2$

29.

4 less than 6 times x

- $4x - 6$
 $6(x - 4)$
 $6(4 - x)$
 $6x - 4$

30.

2 times the quantity of x plus 7

- $7(x + 2)$
 $2(x + 7)$
 $2x + 7$
 $7x + 2$



Please stop, put your pencil down and wait for the next directions.



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Questions 31-33: Evaluate the expression for the given value of x .

31. Evaluate $4x + 3$ for $x = 2$.

Answer: 11

32. Evaluate $x^2 + 5$ for $x = 3$.

Answer: 14

33. Evaluate $20 - 3x$ for $x = 4$.

Answer: 8



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Questions 34-36: Find the equivalent expression.

34.

$$x + x + x$$

- $x + 3$
 $3x$
 x^3
 $3x^3$

35.

$$6x + 2 + 3x$$

- $6x + 5$
 $9x + 2$
 $11x^2$
 $11x$

36.

$$2(x + 3)$$

- $2x + 6$
 $x + 6$
 $x^2 + 6$
 $2x + 3$



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Questions 37-39: Solve the equation.

37.

$$x + 4 = 12$$

$$x = 8$$

38.

$$12 = 3x$$

$$x = 4$$

39.

$$\frac{1}{3}x = 6$$

$$x = 18$$



Please stop, put your pencil down and wait for the next directions.