

Name \_\_\_\_\_ Date \_\_\_\_

# 8<sup>th</sup> Grade Tier 3 Screener - Spring Answer Key

Questions 1-3: Evaluate the expression.

1.

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

Answer: 42

2.

$$9 - (4 - 3)$$

Answer: 8

3.

$$(7 - 3) \times (2 + 6)$$

Answer: 32



(continued)

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

4.			5.
	3,519 x 5		62 <u>x 34</u>
		Answer: 17595	Answer: 2108
6.			
	527 <u>x 13</u>		
			Please stop, put your pencil down and wait for the next directions.
		Answer: <mark>6851</mark>	

(continued)

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

7.			8.
	5) 2,285		4 ) 9,652
		Answer: <mark>457</mark>	Answer: 2413
9.			
	15 ) 2, 7 6 0		Please stop, put your pencil down and wait for the next directions.
		Answer: 184	

(continued)

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

4	$\mathbf{a}$
_	•

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

$$+3\frac{1}{2}$$

11.

8

$$-2\frac{1}{6}$$

Answer: 8 1/10

Answer: 5 5/6

**12.** 

$$6\frac{1}{5}$$

$$-1\frac{2}{3}$$

STOP

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

Answer: 4 8/15

#### Questions 13-15: Multiply the fractions.

**13**.

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

Answer: 2/15

14.

$$\frac{6}{7}$$
 X  $\frac{2}{5}$ 

Answer: 12/35

**15**.

$$\frac{2}{5}$$
 x  $\frac{5}{6}$ 

Answer: 1/3



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

#### **16**.

$$\frac{1}{6} \div 3$$

Answer: 1/18

#### **17.**

$$\frac{1}{9} \div 5$$

Answer: 1/45

### 18.

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

Answer: 1/56



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

19.

$$11 \div \frac{1}{3}$$

Answer: 33

20.

$$5 \div \frac{1}{4}$$

Answer: 20

21.

$$9 \div \frac{1}{6}$$

Answer: 54/1



#### Questions 22-24: Multiply and divide fractions.

22.

$$\frac{3}{5}$$
 x  $\frac{2}{9}$ 

Answer: 2/15

23.

$$\frac{3}{4} \div \frac{2}{3}$$

Answer: 9/8

24.

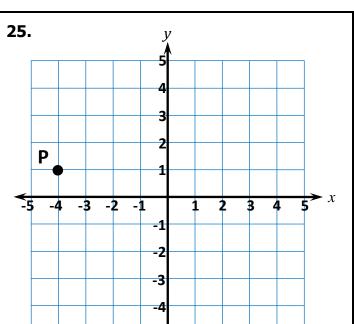
$$\frac{4}{7} \div \frac{2}{5}$$

Answer: 10/7

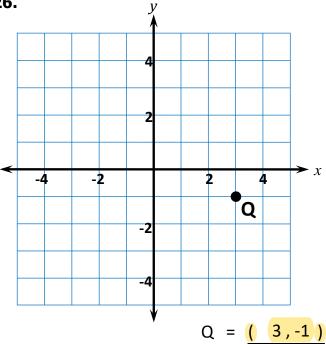


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Questions 25-27: Write the ordered pair for the point.

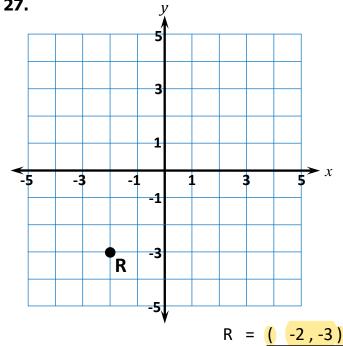


26.



P = (-4, 1)





Questions 28-30: Find the equivalent expression.

28.

The product of *x* and 3, increased by 4

- 0.4x + 3 0.3(x + 4) 0.3x + 4 0.x + 3 + 4

29.

5 less than 8 times x

- $\circ$  8x 5  $\circ$  5x 8  $\circ$  8 5x  $\circ$  8(x 5)

30.

7 times the difference of x and 3

- $\circ$  3x 7  $\circ$  3(x 7)  $\circ$  7x 3  $\circ$  7(x 3)



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

**31.** Evaluate 3x + 6 for x = 4.

Answer: 18

**32.** Evaluate  $x^2 + 4$  for x = 5.

Answer: 29

**33.** Evaluate 15 - 4x for x = 2.

Answer: 7



Questions 34-36: Find the equivalent expression.

34.

$$x + x$$

 $\circ$  2x

 $\circ 2x^2$ 

 $\circ x + 2$ 

 $\circ x^2$ 

35.

$$2x + 8 + 4x$$

 $\circ$  14x

 $\circ$  2x + 12  $\circ$  6x + 8

 $\circ$  14 $x^2$ 

36.

$$4(x + 6)$$

 $0 x^4 + 10 0 4x + 24 0 0 4x + 6 0 x + 24$ 



#### Questions 37-39: Solve the equation.

**37.** 

$$x + 3 = 12$$

x = 9

38.

$$35 = 5x$$

x = 7

39.

$$\frac{1}{2}x = 6$$

x = 12

