



Name _____ Date _____

Algebra Concepts: Winter Progress

Questions 1-3: Add and subtract the integers.

1.

$$(-6) + 4$$

Answer: _____

2.

$$-8 - 3$$

Answer: _____

3.

$$6 - (-8)$$

Answer: _____



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



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(continued)

Questions 4-6: Multiply and divide the integers.

4.

$$-3 \times 8$$

Answer: _____

5.

$$-7(-3)$$

Answer: _____

6.

$$-28 \div -4$$

Answer: _____

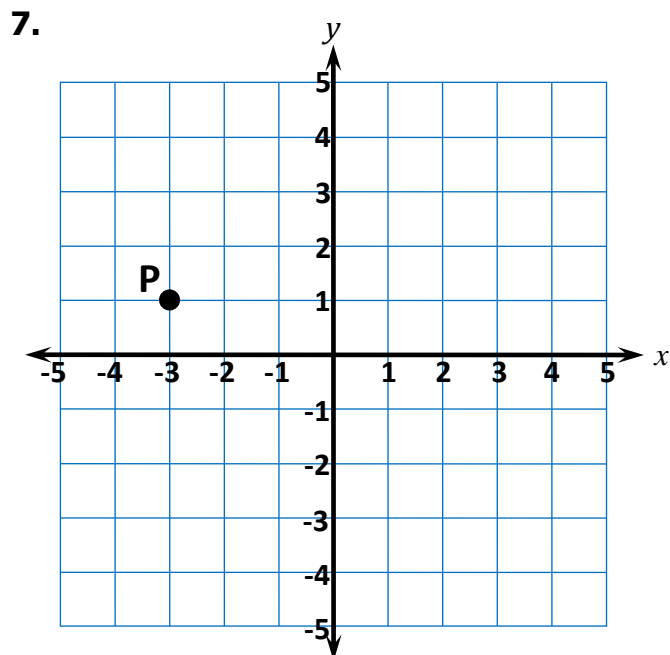


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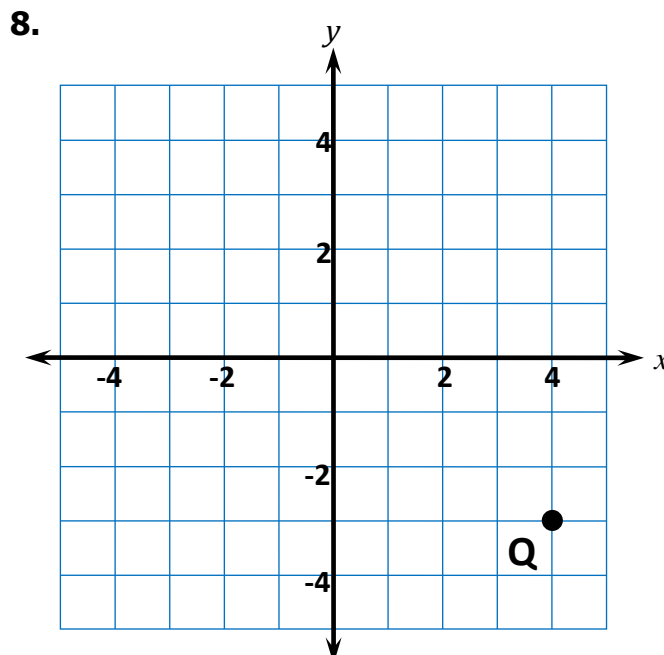
Algebra Concepts: Winter Progress

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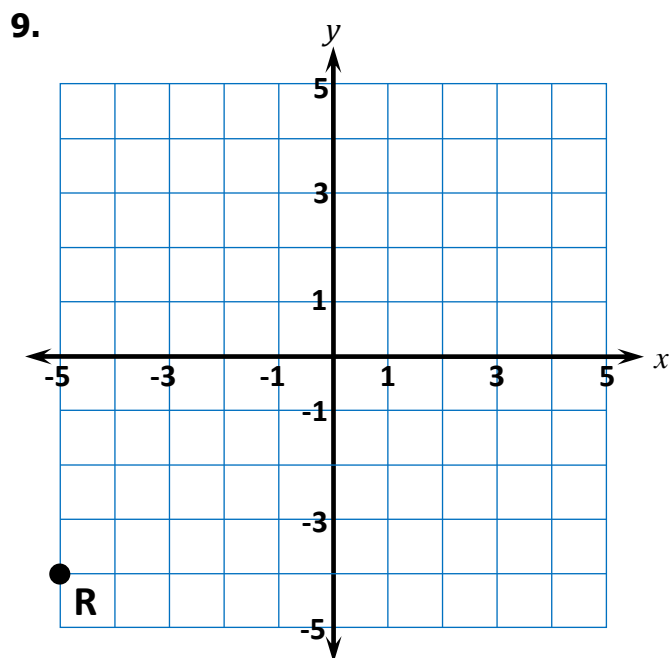
Questions 7-9: Write the ordered pair for the point.



Answer: _____



Answer: _____



Answer: _____



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



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(continued)

Questions 10-12: Find the equivalent expression.

10.

The product of x and 4, decreased by 3

- $4x - 3$ $4(x - 3)$ $3x - 4$ $x + 4 - 3$

11.

2 more than 3 times x

- $2x + 3$ $3x + 2$ $3(x + 2)$ $2(3 + x)$

12.

3 times the difference of x and 4

- $4x - 3$ $4(x - 3)$ $3x - 4$ $3(x - 4)$



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



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(continued)

Questions 13-15: Evaluate the expression for the given value of x .

13. Evaluate $3x + 4$ for $x = 5$.

Answer: _____

14. Evaluate $x^2 + 5$ for $x = 4$.

Answer: _____

15. Evaluate $18 - 4x$ for $x = 2$.

Answer: _____



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Questions 16-18: Find the equivalent expression.

16.

$$x + x$$

- $2x^2$ $x + 2$ x^2 $2x$

17.

$$5x + 3 + 2x$$

- $7x + 3$ $10x$ $10x^2$ $5x + 5$

18.

$$4(x + 3)$$

- $4x + 3$ $4x + 12$ $x^4 + 7$ $x + 12$



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



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(continued)

Questions 19-21: Solve the equation.

19.

$$x + 5 = 15$$

Answer: _____

20.

$$24 = 3x$$

Answer: _____

21.

$$\frac{1}{2}x = 10$$

Answer: _____



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



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(continued)

Questions 22-24: Find the equivalent expression.

22.

$$(3x + 2) + (x + 6)$$

- $4x + 8$ $3x + 8$ $4x + 12$ $3x + 12$

23.

$$(9x + 6) - (4x + 2)$$

- $5x + 8$ $13x + 4$ $5x + 4$ $13x + 8$

24.

$$(5x + 4) - (2x - 3)$$

- $3x + 7$ $3x + 1$ $7x + 1$ $7x + 7$



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



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(continued)

Questions 25-27: Find the equivalent expression.

25.

$$5(x + 3)$$

- $5x + 15$ $5x + 3$ $15x$ $x + 15$

26.

$$9(7x + 4)$$

- $7x + 36$ $63x + 36$ $99x$ $63x + 4$

27.

$$5(3x + 7) + x$$

- $16x + 35$ $15x + 35$ $23x$ $16x + 7$



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



Algebra Concepts: Winter Progress

(continued)

Questions 28-30: Find the equivalent expression.

28.

$$4x + 28$$

- $4(x + 7)$ $4(x + 28)$ $32x$ $4x + 7$

29.

$$18x - 3$$

- $-3(6x + 1)$ $3(6x - 1)$ $15x$ $3(15x - 1)$

30.

$$6x + 10$$

- $2(3x + 5)$ $2(3x + 10)$ $16x$ $6(x + 4)$



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



Algebra Concepts: Winter Progress

(continued)

Questions 31-33: Solve the equation.

31.

$$8 = 2x - 4$$

Answer: _____

32.

$$3(x + 5) = 21$$

Answer: _____

33.

$$\frac{1}{4}x + 5 = 7$$

Answer: _____



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