Name _____ Date _____

# Algebra 1 Readiness Screener - Winter

**Questions 1-3:** Solve the equation.

**1.**

$$8x + 5 = 5x - 4$$

$x$ = _____

**2.**

$$3(2x + 1) = 2x + 11$$

$x$ = _____

**3.**

$$4(x + 2) = 2(3x - 1)$$

$x$ = _____

STOP

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



**Number Correct = _____**

# Algebra 1 Readiness Screener - Winter

(continued)

**Questions 4-6:** Determine the number of solutions for the equation.

**4.**

$$3x + 4 = 3x + 4$$

○ No Solutions ○ One Solution ○ Two Solutions ○ Infinitely Many

**5.**

$$3x - 4 = 3x - 5$$

○ No Solutions ○ One Solution ○ Two Solutions ○ Infinitely Many

**6.**

$$3x + 4 = x + 1 + 3x + 2$$

○ No Solutions ○ One Solution ○ Two Solutions ○ Infinitely Many


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



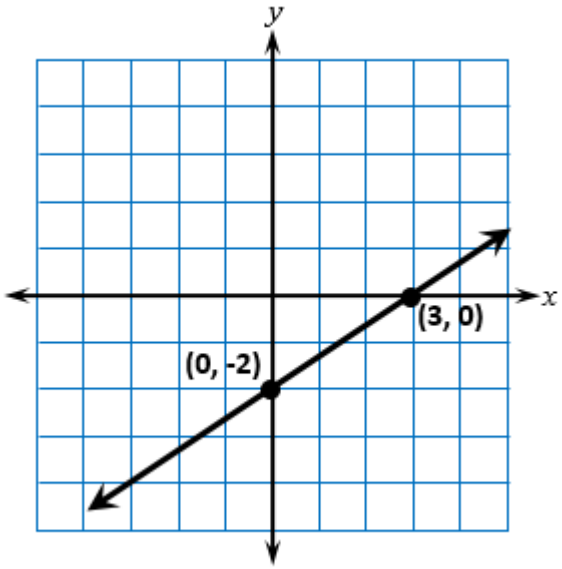
**Number Correct = _____**

# Algebra 1 Readiness Screener - Winter

(continued)

**Questions 7-9:** Complete the equation of the line.

**7.** Find the equation of the line in the graph.




$y = \square x + \square$

**8.** Find the equation of the line in the table

| $x$ | $y$ |
|---|---|
| -2 | 0 |
| -1 | 4 |
| 0 | 8 |
| 1 | 12 |
| 2 | 16 |

$y = \square x + \square$

GO

Please continue to question 9 on the next page.



**Number Correct = _____**

# Algebra 1 Readiness Screener - Winter

(continued)

**9.** Find the equation of the line through the two points.

$(2, 9)$ and $(5, 15)$

$y = \square x + \square$


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



**Number Correct = _____**

# Algebra 1 Readiness Screener - Winter

(continued)

**Questions 10-12:** Find the equivalent expression.

**10.**

$$5^3 \times 5^2$$

○ $5^6$ ○ $5^5$ ○ $25^6$ ○ $25^5$

**11.**

$$\frac{4^9}{4^3}$$

○ $1^4$ ○ $4^3$ ○ $4^6$ ○ $4^{18}$

**12.**

$$(2^3)^5$$

○ $2^{-2}$ ○ $2^2$ ○ $2^8$ ○ $2^{15}$


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



**Number Correct = _____**

# Algebra 1 Readiness Screener - Winter

(continued)

**Questions 13-15:** Solve the equation.

**13.**

$$x^2 = 16$$

○ $-4$ ○ $4$ ○ $\pm 4$ ○ $8$

**14.**

$$x^3 = -27$$

○ $-3$ ○ $3$ ○ $\pm 3$ ○ $-9$

**15.**

$$x^2 = \frac{81}{100}$$

○ $-\frac{9}{10}$ ○ $\frac{9}{10}$ ○ $\pm\frac{9}{10}$ ○ $\pm\frac{9}{50}$

STOP

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



**Number Correct = _____**