Name _____ Date _____

Algebra 1 Readiness: Fall Progress

Questions 1-3: Solve the equation.

1.

$$9x + 8 = 4x - 2$$

$x =$ _____

2.

$$3(2x - 4) = 2x + 8$$

$x =$ _____

3.

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

$x =$ _____

STOP

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

Number Correct = _____

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.

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

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

6.

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

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

STOP

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

Number Correct = _____

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

7. Find the equation of the line in the graph.
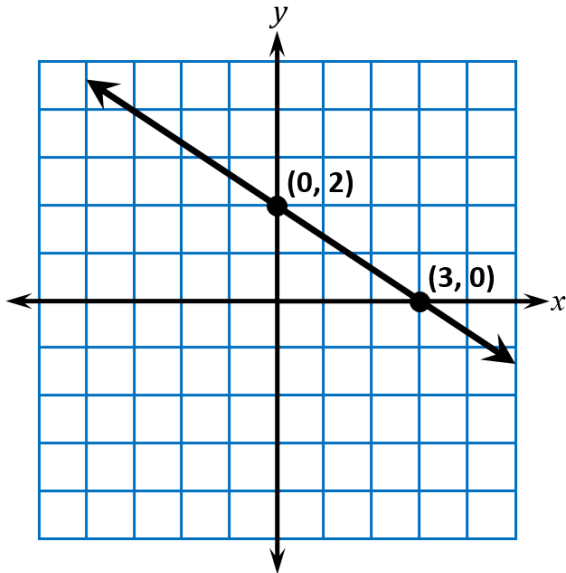
$$y = \boxed{}\ x\ +\ \boxed{}$$

8. Find the equation of the line in the table

x	y
-2	8
-1	6
0	4
1	2
2	0

$$y = \boxed{}\ x\ +\ \boxed{}$$

(GO)

Please continue to question 9 on the next page.

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

$(5, 7)$ and $(8, 13)$

$$y \;=\; \boxed{} \; x \;+\; \boxed{}$$

STOP

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

Number Correct = _____

Questions 10-12: Find the equivalent expression.

10.

$$4^3 \times 4^6$$

○ 4^9 ○ 4^{18} ○ 16^9 ○ 16^{18}

11.

$$\frac{5^8}{5^4}$$

○ 1^4 ○ 5^4 ○ 5^{12} ○ 5^{32}

12.

$$(3^4)^5$$

○ 3^{-1} ○ 3^1 ○ 3^9 ○ 3^{20}

STOP

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

Number Correct = _____

Questions 13-15: Solve the equation.

13.

$$x^2 = 64$$

○ −8   ○ 8   ○ ±8   ○ 32

14.

$$x^3 = -27$$

○ −3   ○ 3   ○ ±3   ○ -9

15.

$$x^2 = \frac{4}{36}$$

○ $-\frac{2}{6}$ ○ $\frac{2}{6}$ ○ $\pm\frac{2}{6}$ ○ $\pm\frac{2}{18}$

STOP

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