Algebra 1 Readiness Screener - Fall

Questions 1-3: Solve the equation.

1.

$$2x + 9 = 4x - 1$$

$x =$ _____

2.

$$2(3x + 6) = 2x + 4$$

$x =$ _____

3.

$$2(x + 10) = 4(2x - 1)$$

$x =$ _____

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.

$$2x + 6 = -2x - 6$$

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

5.

$$2x - 6 = 2x - 6$$

   ○ No Solutions   ○ One Solution   ○ Two Solutions   ○ Infinitely Many
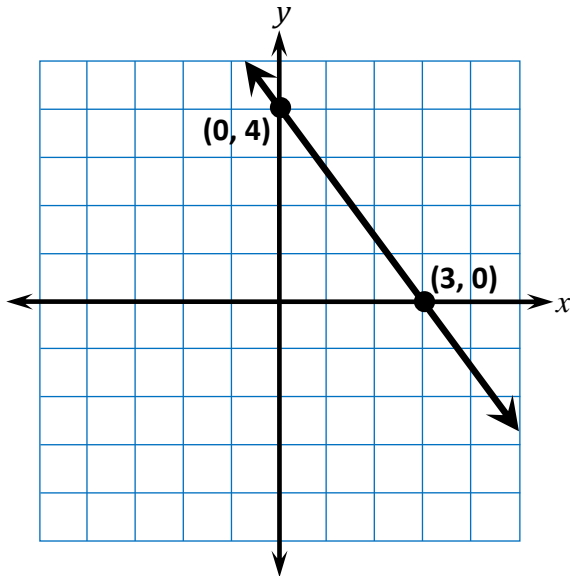
6.

$$2x + 6 = x + 1 + x + 6$$

   ○ 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	0
-1	2
0	4
1	6
2	8

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

(GO)

Please continue to question 9 on the next page.

Number Correct = _____

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

$(2, 8)$ and $(4, 14)$

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

STOP

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

Number Correct = _____

Questions 10-12: Find the equivalent expression.

10.

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

○ 2^8 ○ 2^{15} ○ 4^8 ○ 4^{15}

11.

$$\frac{3^8}{3^2}$$

○ 1^4 ○ 3^4 ○ 3^6 ○ 3^{10}

12.

$$(4^3)^5$$

○ 4^{-2} ○ 4^2 ○ 4^8 ○ 4^{15}

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

Questions 13-15: Solve the equation.

13.

$$x^2 = 81$$

○ −9   ○ 9   ○ ±9   ○ 40.5

14.

$$x^3 = 64$$

○ −4   ○ 4   ○ ±4   ○ 32

15.

$$x^2 = \frac{9}{25}$$

○ $-\dfrac{3}{5}$ ○ $\dfrac{3}{5}$ ○ $\pm\dfrac{3}{5}$ ○ $\pm\dfrac{3}{25}$

STOP

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

Number Correct = _____