SRHS - Math 1 - #7.0b Name_____

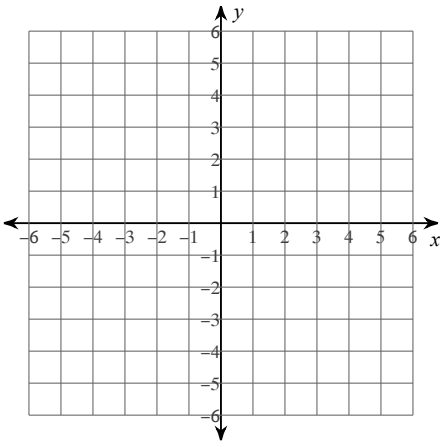
Solve each equation.

1) $-2p - 4p + 6 = 3 - 7p$

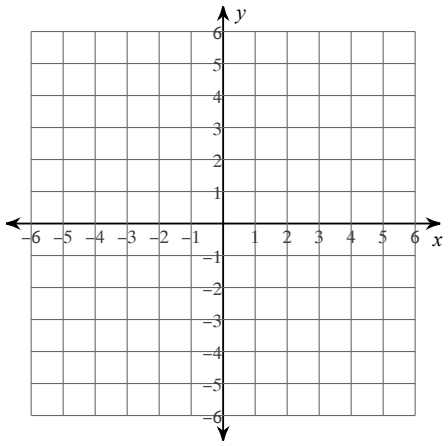
2) $-1 = \frac{n - 9}{4}$

Sketch the graph of each line.

3) $y = \frac{6}{5}x - 3$

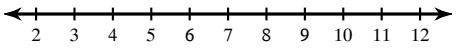


4) $y = 4$

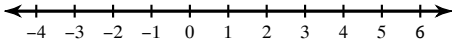


Solve each inequality and graph its solution.

5) $-2(x + 5) \geq -28$



6) $\frac{x}{2} - 2 < 0$



Write the point-slope form of the equation of the line through the given points.

7) through: $(-3, 3)$ and $(-1, -2)$

Write the slope-intercept form of the equation of the line through the given points.

8) through: $(-2, -4)$ and $(-3, -1)$

Solve the system of linear equations.

9) $3x - 2y = 4$
$x + 2y = -4$

Solve the system of linear equations.

10) $y = 2x + 9$
$-7x + 5y = 21$

Determine whether the following represents a relationship that is linear, exponential growth, exponential decay, or none of these.

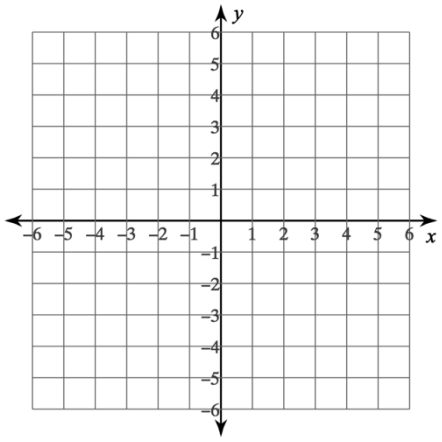
11. $y = 8x^3$

12. $y = 2.67(1.13)^x$

Evaluate the function for the given value of x

11. $y = 3(6)^x$ for $x = 4$

14. $y = 6(3)^x$ for $x = -2$



Graph the function:

15. $f(x) = \frac{1}{2}\left(\frac{2}{3}\right)^x$

Write a function that represents the situation.

16. Math Club t-shirt sales began at 1,200 and increase by 8% each year.

17. An SAT prep course had 236 participants but decreased by 13% every year.

Write an explanation to match the given exponential function:

18. $y = 801(1.12)^t$

Write an exponential function for the given data:

19.

x	y
-2	$\frac{343}{144}$
-1	$\frac{49}{12}$
0	7
1	12
2	$\frac{144}{7}$

20.

x	y
-2	.171875
-1	1.375
0	11
1	88
2	704