Cumulative Review #011222 Name_____

Period and Class_____

Solve each equation.

1) $57 = 3(9 + x)$

2) $6 = \frac{b}{10} + 4$

3) $1 + n = n + 1$

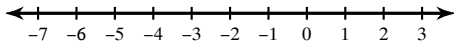
4) $6 + |x + 1| = 7$

Solve each equation for the indicated variable.

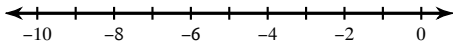
5) y - 5 = 3 (x + 2) for y

Solve each inequality and graph its solution.

6) $-2x > 10$

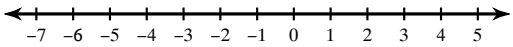


7) $x - 4 < -11$



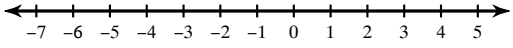
Solve each compound inequality and graph its solution.

8) $-9 < 10a + 1 \leq 21$



Solve each inequality and graph its solution.

9) $|x| \leq 2$



10) Evaluate the function:
f(x) = 5x + 1 for x = 8

11) Find the value of x so that the function has the given value:
f(x) = 5x + 1 ; f(x) = - 29

12) Find the intercepts of:
3x - 7y = 24

Find the slope of the line through each pair of points.

13) $(-2, -1), (-14, 6)$

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

14) through: $(3, -1)$ and $(0, -5)$

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

15) through: $(-2, -1)$, slope $= \frac{5}{4}$

Write the point-slope form of the equation of the line described.

16) through: $(5, -1)$, parallel to $y = -\frac{1}{2}x - 2$

Solve each system by substitution.

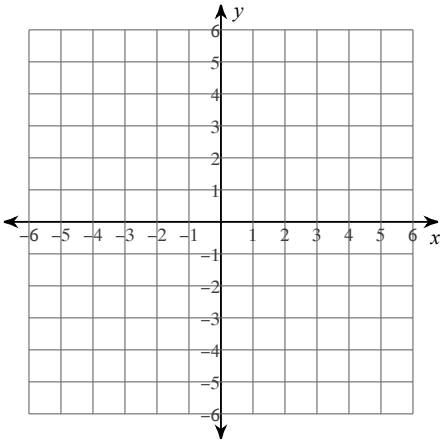
17) $x + y = -2$
$-4x - 3y = 4$

Solve each system by elimination.

18) $10x - 9y = -11$
$-x + 9y = -7$

Sketch the graph of each linear inequality.

19) $y > -\frac{3}{4}x - 1$



Sketch the graph of each function.

20) $y = 2 \cdot \left(\frac{1}{3}\right)^x$