Algebra 2 Name_____ ID: 1

Unit 1 Test Review

Date_____ Period____

Solve each equation. Check for extraneous solutions.

1) $|3 - 9v| = -87$

2) $|-6 + 6n| = 12$

3) $|2x + 12| = 4x$

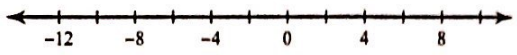
4) $-2 + |8 - 7r| = 20$

5) $|9 - 2x| = 10 + 3x$

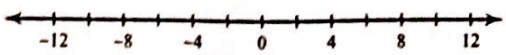
6) $\frac{|-x + 9|}{9} = 4$

Solve each inequality and graph its solution.

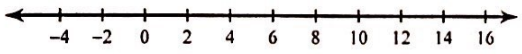
7) $|-6-7k| > 50$



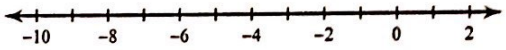
8) $|2+8x| \geq 66$



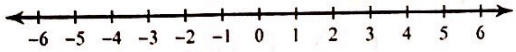
9) $|6-x|-4 \leq 4$



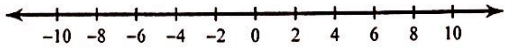
10) $\dfrac{|10+4n|}{4} \leq 4$



11) $\dfrac{|-4+7x|}{6} \geq 2$

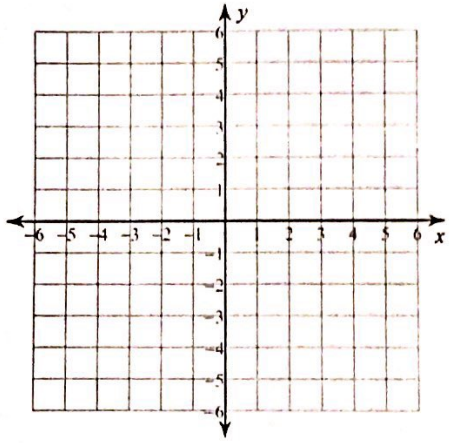


12) $|-6v-3|-3 \geq 42$

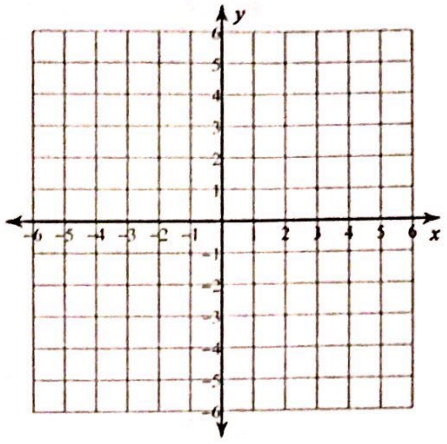


Graph each equation.State the vertex, axis of symetry, domain, range, and any transformations that occured to the parent function.

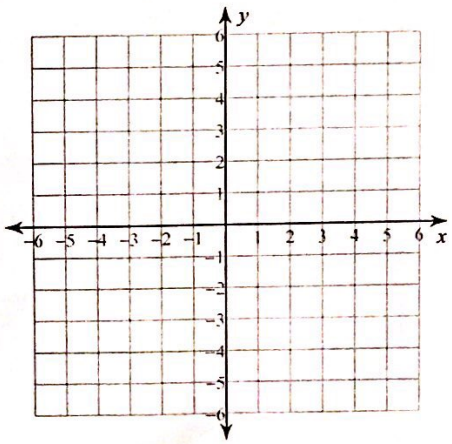
13) $y = |x| + 3$



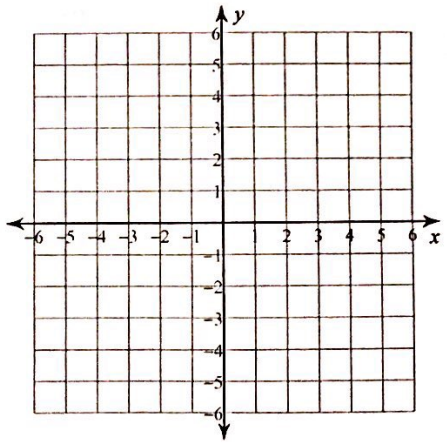
14) $y = |x - 1|$



15) $y = -2|x - 2|$



16) $y = 3|x - 3| - 4$



Solve each system.

17) $5x - 4y + z = -15$
$-2x + 4y - 2z = 2$
$4x - 4y - 6z = 26$

18) $-6y + z = 25$
$3y - 2z = -14$
$2x + 2y + 5z = 5$

19) $-3x + 5y - z = -13$
$-x + y + 3z = -23$
$-2y + 4z = -20$

20) $-4x - 3y + 3z = -23$
$-6x - y = -16$
$-3z = 3$