Algebra 1   Name_____

Factoring and Graphing Review

Date_____ Period____

Factor each completely.

1) $6k^2 - 108k + 480$

2) $4k^2 + 44k + 96$

3) $x^2 + 15x + 50$

4) $v^2 + 14v + 45$

5) $2x^2 - 9x - 18$

6) $7x^2 - 4x - 20$

7) $7r^2 + 68r + 45$

8) $5x^2 + x - 6$

9) $10x^2 - 75x + 35$
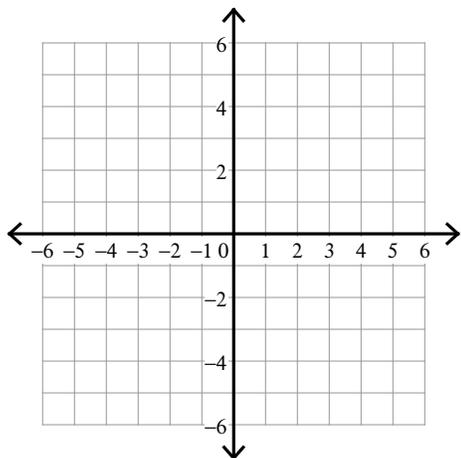
10) $16n^2 - 25$

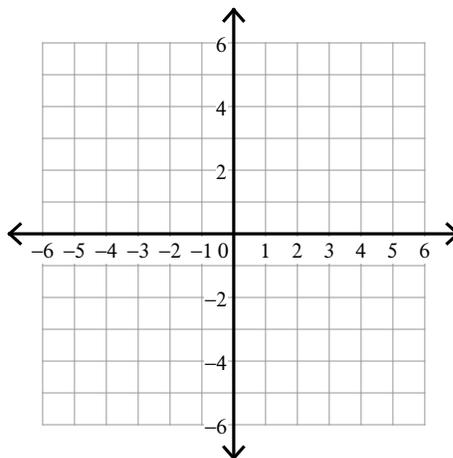11) $n^2 - 16$

12) $9r^2 - 4$

13) $25k^2 - 1$

14) $25x^2 + 30x + 9$

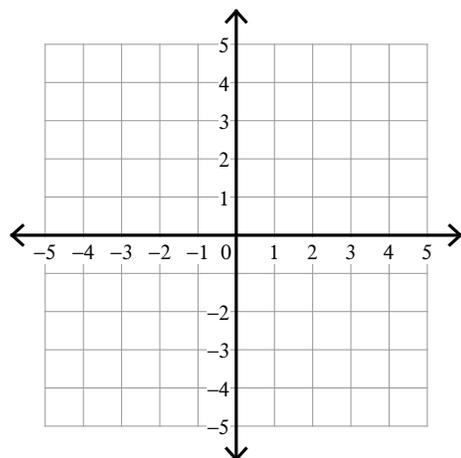**Sketch the graph of each linear inequality.**

15) $y \geq 2x - 3$

16) $y \geq 0$

Sketch the solution to each system of inequalities.

17) $y \leq -5x + 2$
   $y > -x - 2$

18) $y \geq \dfrac{1}{3}x - 2$
   $y \leq \dfrac{5}{3}x + 2$