Secondary Math 2/2H Name_____

1.5 Solve by Factoring

Date_____ Period____

Solve each equation by factoring.

1) $r^2 + 4r - 12 = 0$

2) $x^2 - 10x + 21 = 0$

3) $m^2 + 11m + 20 = -4$

4) $p^2 - 8p + 10 = 3$

5) $x^2 + 48 = -14x$

6) $a^2 - 2a = 24$

7) $2r^2 + 2r - 7 = -3r + r^2 - 1$

8) $x^2 + 12x + 32 = -3$

9) $7n^2 - 2n = 0$

10) $3x^2 + 17x - 28 = 0$

11) $15k^2 + 28k + 4 = -8$

12) $3n^2 - 29n + 51 = -5$

13) $3k^2 - 2k = 0$

14) $5r^2 = -8 + 13r$

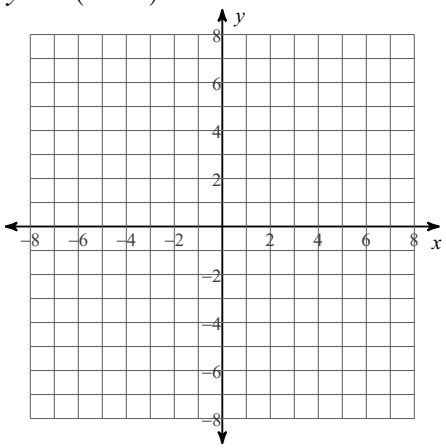
15) $-2a^2 - 12a - 23 = -3 - 5a - 5a^2$

16) $b^2 - 8b = -4b^2$

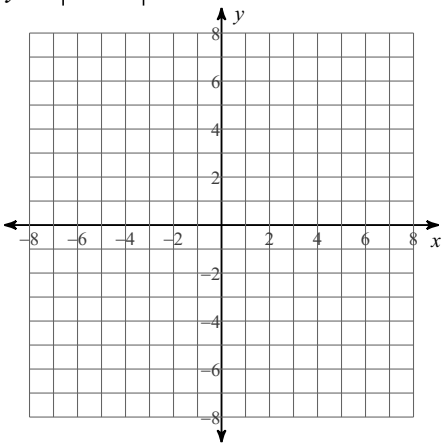
17) $x^2 - 21 = 4x$

Given the equation, graph the transformation.

18) $y = -(x + 3)^2 - 3$



19) $y = |x - 2| + 1$



20) $y = \sqrt{x + 4} - 5$