10D Name_____

Solving From Vertex Form

Date_____

Solve each question for the zeros. For #13-16, solve for the x-value that gives the included y-value, then state the coordinates.

1) $y = (x + 8)^2 - 4$

2) $y = \frac{1}{3}(x - 6)^2 + 8$

3) $y = -5(x + 8)^2 + 3$

4) $y = -6(x + 2)^2 + 3$

5) $y = 2(x - 9)^2 - 10$

6) $y = (x - 1)^2$

7) $y = -(x + 1)^2 + 8$

8) $y = 2(x + 1)^2 + 8$

9) $y = -\frac{3}{4}(x+7)^2 + 3$

10) $y = -\frac{1}{18}(x+4)^2 + 3$

11) $y = x^2 - 5$

12) $y = 2(x+3)^2 - 8$

13) $9 = 2(x + 7)^2 + 1$

14) $26 = -3(x - 10)^2 + 8$

15) $10 = -4(x - 7)^2 + 9$

16) $-14 = -\frac{4}{5}(x + 2)^2 - 6$

Math 10D Name_____

Solving By Factoring

Date_____

Solve each equation by factoring.

1) $n^2 - 6n - 7 = 0$

2) $8v^2 - 36v + 16 = 0$

3) $3b^2 + 13b + 4 = 0$

4) $8x^2 - 32x + 22 = -2$

5) $3n^2 - 8n - 27 = 8$

6) $a^2 + 12a = -36$

7) $5k^2 = 4 + k$

8) $5x^2 - 61x + 168 = 5x - x^2$

9) $7x^2 = 105 - 14x$

10) $4p^2 - 12p - 10 = -p^2 - 1$

11) $28n^2 + 4n - 38 = -6 + 8n^2 - 8n$

12) $14n^2 + 6n = 2 - 2n + 4n^2$

Math 10D Date_____

Solving Using The Quadratic Formula

Solve each equation with the quadratic formula.

1) $6n^2 + 7n - 55 = 0$

2) $12k^2 - 11k - 24 = 0$

3) $3p^2 + 5 = 8$

4) $8p^2 + 5p + 2 = -9$

5) $9m^2 - 7m = -2$

6) $8n^2 + 6n = 24$

7) $-3x^2 + 5x - 39 = -6x^2 + 11$

8) $15n^2 - 3n - 7 = -6n + 11n^2$