Name_____

Using the Quadratic Formula

Date_____ Period____

Solve each equation with the quadratic formula.

1) $m^2 - 5m - 14 = 0$

2) $b^2 - 4b + 4 = 0$

3) $2m^2 + 2m - 12 = 0$

4) $2x^2 - 3x - 5 = 0$

5) $x^2 + 4x + 3 = 0$

6) $2x^2 + 3x - 20 = 0$

7) $4b^2 + 8b + 7 = 4$

8) $2m^2 - 7m - 13 = -10$

9) $2x^2 - 3x - 15 = 5$

10) $x^2 + 2x - 1 = 2$

11) $2k^2 + 9k = -7$

12) $5r^2 = 80$

13) $2x^2 - 36 = x$

14) $5x^2 + 9x = -4$

15) $k^2 - 31 - 2k = -6 - 3k^2 - 2k$

16) $9n^2 = 4 + 7n$

17) $8n^2 + 4n - 16 = -n^2$

18) $8n^2 + 7n - 15 = -7$

Kuta Software - Infinite Algebra 1 Name_____

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Date_____ Period____

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{7, −2}

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{2}

3) $2m^2 + 2m - 12 = 0$

{2, −3}5

4) $2x^2 - 3x - 5 = 0$

{ , −1}

2

5) $x^2 + 4x + 3 = 0$

{−1, −3}5

6) $2x^2 + 3x - 20 = 0$

{ , −4}

2

7) $4b^2 + 8b + 7 = 4$

{ −1 −3 7 + 73 7 − 73

8) $2m^2 - 7m - 13 = -10$

– , – }

2 2 4 4

{ , }

9) $2x^2 - 3x - 15 = 5$

2

{ 5

4, – }

2

15) $\frac{k^2}{2} - 31 - 2k = -6 - 3\frac{k^2}{2} - 2k$

{ 5 5

, – }

2 2

11) $2k^2 + 9k = -7$

{ 7

−1, – }

2

17) $8n^2 + 4n - 16 = -n^2$,

{ }

−2 + 2 37 −2 − 2 37

9 9

13) $2x^2 - 36 = x$

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, −4}

10) $x^2 + 2x - 1 = 2$

{1, −3}

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{4, −4}

14) $5x^2 + 9x = -4$

$\left\{-\frac{4}{5}, -1\right\}$

16) $9^{n_2} = 4 + 7n$,

$\left\{\frac{7 + \sqrt{193}}{18}, \frac{7 - \sqrt{193}}{18}\right\}$

18) $8n^2 + 7n - 15 =$

$\left\{\frac{-7 + \sqrt{305}}{16}, \frac{-7 - \sqrt{305}}{16}\right\}$