Algebra 1

Name_____

Assignment

Date_____ Period____

Solve each equation by completing the square.

1) $k^2 + 16k - 2 = 8$

2) $k^2 - 6k - 90 = 4$

3) $m^2 - 8m - 52 = 5$

4) $n^2 - 2n - 100 = -6$

5) $x^2 - 16x + 17 = -4$

6) $x^2 - 8x - 100 = -4$

7) $x^2 + 4x - 85 = -8$

8) $p^2 - 20p - 37 = 7$

9) $n^2 - 12n - 105 = -6$

10) $v^2 - 8v - 50 = 9$

11) $b^2 - 6b - 31 = -4$

12) $n^2 - 10n + 12 = -9$

13) $p^2 + 12p - 21 = 7$

14) $k^2 + 10k - 5 = 8$

15) $x^2 + 20x + 92 = -4$

16) $a^2 + 2a - 45 = 3$

17) $p^2 - 12p - 76 = 10$

18) $r^2 + 12r + 35 = 3$

19) $b^2 + 14b - 20 = -5$

20) $b^2 + 6b - 22 = -6$

21) $n^2 + 8n - 14 = -5$

22) $n^2 + 16n + 48 = -7$

23) $n^2 + 14n - 73 = -2$

24) $n^2 + 8n - 11 = 9$

Algebra 1   Name_____

Assignment
Date_____ Period____

Solve each equation by completing the square.

1) $k^2 + 16k - 2 = 8$

$\{0.602, -16.602\}$

2) $k^2 - 6k - 90 = 4$

$\{13.149, -7.149\}$

3) $m^2 - 8m - 52 = 5$

$\{12.544, -4.544\}$

4) $n^2 - 2n - 100 = -6$

$\{10.747, -8.747\}$

5) $x^2 - 16x + 17 = -4$

$\{14.557, 1.443\}$

6) $x^2 - 8x - 100 = -4$

$\{14.583, -6.583\}$

7) $x^2 + 4x - 85 = -8$

$\{7, -11\}$

8) $p^2 - 20p - 37 = 7$

$\{22, -2\}$

9) $n^2 - 12n - 105 = -6$

$\{17.619, -5.619\}$

10) $v^2 - 8v - 50 = 9$

$\{12.66, -4.66\}$

11) $b^2 - 6b - 31 = -4$

$\{9, -3\}$

12) $n^2 - 10n + 12 = -9$

$\{7, 3\}$

13) $p^2 + 12p - 21 = 7$

$\{2, -14\}$

14) $k^2 + 10k - 5 = 8$

$\{1.164, -11.164\}$

15) $x^2 + 20x + 92 = -4$

$\{-8, -12\}$

16) $a^2 + 2a - 45 = 3$

$\{6, -8\}$

17) $p^2 - 12p - 76 = 10$

$\{17.045, -5.045\}$

18) $r^2 + 12r + 35 = 3$

$\{-4, -8\}$

19) $b^2 + 14b - 20 = -5$

$\{1, -15\}$

20) $b^2 + 6b - 22 = -6$

$\{2, -8\}$

21) $n^2 + 8n - 14 = -5$

$\{1, -9\}$

22) $n^2 + 16n + 48 = -7$

$\{-5, -11\}$

23) $n^2 + 14n - 73 = -2$

$\{3.954, -17.954\}$

24) $n^2 + 8n - 11 = 9$

$\{2, -10\}$

Algebra 1   Name_____

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Solve each equation by completing the square.

1) $x^2 - 14x + 50 = 5$

2) $n^2 + 16n - 69 = 9$

3) $k^2 - 20k + 61 = 10$

4) $x^2 + 6x - 57 = 2$

5) $m^2 - 6m - 92 = -8$

6) $p^2 + 12p - 53 = -8$

7) $n^2 + 6n - 18 = 9$

8) $p^2 - 20p - 19 = 2$

9) $k^2 - 4k - 10 = 2$

10) $m^2 - 8m + 1 = 2$

11) $x^2 - 20x + 27 = 8$

12) $v^2 - 20v - 45 = 3$

13) $p^2 - 10p + 30 = 8$

14) $x^2 - 2x - 60 = -5$

15) $x^2 - 2x - 84 = 9$

16) $a^2 - 10a - 14 = 7$

17) $x^2 + 12x - 48 = 10$

18) $x^2 + 10x - 61 = -7$

19) $x^2 - 6x - 11 = -4$

20) $m^2 + 2m - 57 = -6$

21) $n^2 + 14n + 50 = 5$

22) $x^2 - 8x - 21 = -2$

23) $x^2 - 20x + 43 = 7$

24) $p^2 + 4p - 100 = -2$

Algebra 1   Name_____

Assignment

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Solve each equation by completing the square.

1) $x^2 - 14x + 50 = 5$

   $\{9, 5\}$

2) $n^2 + 16n - 69 = 9$

   $\{3.916, -19.916\}$

3) $k^2 - 20k + 61 = 10$

   $\{17, 3\}$

4) $x^2 + 6x - 57 = 2$

   $\{5.246, -11.246\}$

5) $m^2 - 6m - 92 = -8$

   $\{12.644, -6.644\}$

6) $p^2 + 12p - 53 = -8$

   $\{3, -15\}$

7) $n^2 + 6n - 18 = 9$

   $\{3, -9\}$

8) $p^2 - 20p - 19 = 2$

   $\{21, -1\}$

9) $k^2 - 4k - 10 = 2$

   $\{6, -2\}$

10) $m^2 - 8m + 1 = 2$

    $\{8.123, -0.123\}$

11) $x^2 - 20x + 27 = 8$

    $\{19, 1\}$

12) $v^2 - 20v - 45 = 3$

    $\{22.166, -2.166\}$

13) $p^2 - 10p + 30 = 8$

    $\{6.732, 3.268\}$

14) $x^2 - 2x - 60 = -5$

    $\{8.483, -6.483\}$

15) $x^2 - 2x - 84 = 9$

    $\{10.695, -8.695\}$

16) $a^2 - 10a - 14 = 7$

    $\{11.782, -1.782\}$

17) $x^2 + 12x - 48 = 10$

    $\{3.695, -15.695\}$

18) $x^2 + 10x - 61 = -7$

    $\{3.888, -13.888\}$

19) $x^2 - 6x - 11 = -4$

    $\{7, -1\}$

20) $m^2 + 2m - 57 = -6$

    $\{6.211, -8.211\}$

21) $n^2 + 14n + 50 = 5$

    $\{-5, -9\}$

22) $x^2 - 8x - 21 = -2$

    $\{9.916, -1.916\}$

23) $x^2 - 20x + 43 = 7$

    $\{18, 2\}$

24) $p^2 + 4p - 100 = -2$

    $\{8.1, -12.1\}$

Algebra 1   Name_____

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Solve each equation by completing the square.

1) $k^2 + 18k - 78 = 10$

2) $n^2 + 16n + 23 = -3$

3) $n^2 + 14n + 34 = -6$

4) $n^2 + 18n + 25 = -3$

5) $n^2 + 4n - 48 = -3$

6) $n^2 - 10n - 67 = 8$

7) $n^2 + 6n - 31 = -6$

8) $n^2 - 4n - 10 = 2$

9) $x^2 + 8x + 13 = 10$

10) $n^2 + 2n - 24 = -9$

11) $x^2 - 10x - 5 = 6$

12) $n^2 + 16n + 12 = 10$

13) $x^2 + 6x - 94 = -3$

14) $b^2 + 20b + 25 = -8$

15) $k^2 - 14k - 25 = -3$

16) $x^2 + 16x + 27 = -5$

17) $a^2 - 8a - 29 = -9$

18) $x^2 + 8x + 7 = -8$

19) $p^2 - 14p + 16 = -8$

20) $a^2 - 10a - 17 = -8$

21) $v^2 - 20v + 109 = 10$

22) $p^2 + 18p + 23 = -9$

23) $r^2 - 10r - 87 = 9$

24) $p^2 - 18p + 79 = 7$

Algebra 1   Name_____

Assignment

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Solve each equation by completing the square.

1) $k^2 + 18k - 78 = 10$

   {4, –22}

2) $n^2 + 16n + 23 = -3$

   {–1.836, –14.164}

3) $n^2 + 14n + 34 = -6$

   {–4, –10}

4) $n^2 + 18n + 25 = -3$

   {–1.72, –16.28}

5) $n^2 + 4n - 48 = -3$

   {5, –9}

6) $n^2 - 10n - 67 = 8$

   {15, –5}

7) $n^2 + 6n - 31 = -6$

   {2.831, –8.831}

8) $n^2 - 4n - 10 = 2$

   {6, –2}

9) $x^2 + 8x + 13 = 10$

   {–0.394, –7.606}

10) $n^2 + 2n - 24 = -9$

   {3, –5}

11) $x^2 - 10x - 5 = 6$

   {11, –1}

12) $n^2 + 16n + 12 = 10$

   {–0.126, –15.874}

13) $x^2 + 6x - 94 = -3$

   {7, –13}

14) $b^2 + 20b + 25 = -8$

   {–1.815, –18.185}

15) $k^2 - 14k - 25 = -3$

   {15.426, –1.426}

16) $x^2 + 16x + 27 = -5$

   {–2.343, –13.657}

17) $a^2 - 8a - 29 = -9$

   {10, –2}

18) $x^2 + 8x + 7 = -8$

   {–3, –5}

19) $p^2 - 14p + 16 = -8$

   {12, 2}

20) $a^2 - 10a - 17 = -8$

   {10.831, –0.831}

21) $v^2 - 20v + 109 = 10$

   {11, 9}

22) $p^2 + 18p + 23 = -9$

   {–2, –16}

23) $r^2 - 10r - 87 = 9$

   {16, –6}

24) $p^2 - 18p + 79 = 7$

   {12, 6}

Algebra 1   Name_____

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Solve each equation by completing the square.

1) $x^2 + 4x + 12 = 9$

2) $x^2 - 14x + 39 = 6$

3) $n^2 - 4n - 74 = 5$

4) $r^2 - 4r - 14 = -9$

5) $n^2 + 16n - 71 = -2$

6) $a^2 - 4a - 39 = 6$

7) $n^2 - 6n - 51 = -8$

8) $p^2 + 12p - 39 = 8$

9) $n^2 + 10n + 14 = 9$

10) $a^2 + 12a - 11 = 6$

11) $x^2 + 4x - 68 = 5$

12) $n^2 - 10n + 17 = 8$

13) $m^2 - 12m - 41 = -7$

14) $p^2 - 18p + 18 = -7$

15) $a^2 - 18a + 53 = 5$

16) $m^2 - 10m - 78 = -3$

17) $n^2 + 4n - 43 = 2$

18) $n^2 + 12n - 86 = 9$

19) $m^2 - 10m + 8 = -6$

20) $m^2 + 12m = -4$

21) $a^2 - 16a + 50 = 2$

22) $n^2 + 18n + 15 = -2$

23) $n^2 + 18n - 24 = -5$

24) $x^2 - 8x - 59 = -7$

Algebra 1   Name_____

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Solve each equation by completing the square.

1) $x^2 + 4x + 12 = 9$

    {−1, −3}

2) $x^2 − 14x + 39 = 6$

    {11, 3}

3) $n^2 − 4n − 74 = 5$

    {11.11, −7.11}

4) $r^2 − 4r − 14 = −9$

    {5, −1}

5) $n^2 + 16n − 71 = −2$

    {3.533, −19.533}

6) $a^2 − 4a − 39 = 6$

    {9, −5}

7) $n^2 − 6n − 51 = −8$

    {10.211, −4.211}

8) $p^2 + 12p − 39 = 8$

    {3.11, −15.11}

9) $n^2 + 10n + 14 = 9$

    {−0.528, −9.472}

10) $a^2 + 12a − 11 = 6$

    {1.28, −13.28}

11) $x^2 + 4x − 68 = 5$

    {6.775, −10.775}

12) $n^2 − 10n + 17 = 8$

    {9, 1}

13) $m^2 − 12m − 41 = −7$

    {14.367, −2.367}

14) $p^2 − 18p + 18 = −7$

    {16.483, 1.517}

15) $a^2 − 18a + 53 = 5$

    {14.745, 3.255}

16) $m^2 − 10m − 78 = −3$

    {15, −5}

17) $n^2 + 4n − 43 = 2$

    {5, −9}

18) $n^2 + 12n − 86 = 9$

    {5.446, −17.446}

19) $m^2 − 10m + 8 = −6$

    {8.317, 1.683}

20) $m^2 + 12m = −4$

    {−0.343, −11.657}

21) $a^2 − 16a + 50 = 2$

    {12, 4}

22) $n^2 + 18n + 15 = −2$

    {−1, −17}

23) $n^2 + 18n − 24 = −5$

    {1, −19}

24) $x^2 − 8x − 59 = −7$

    {12.246, −4.246}

Algebra 1

Name_____

Assignment

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Solve each equation by completing the square.

1) $x^2 - 12x - 73 = -9$

2) $m^2 - 4m - 84 = 10$

3) $n^2 - 12n + 2 = -9$

4) $k^2 - 16k + 60 = 5$

5) $x^2 - 6x - 31 = -6$

6) $p^2 + 2p - 17 = -9$

7) $x^2 + 20x + 92 = -7$

8) $x^2 + 20x + 71 = -4$

9) $x^2 - 6x + 14 = 9$

10) $n^2 + 16n + 37 = 9$

11) $x^2 + 10x - 40 = -10$

12) $r^2 - 4r - 34 = -6$

13) $a^2 - 6a - 34 = 10$

14) $x^2 + 2x - 40 = -4$

15) $b^2 + 18b - 46 = -6$

16) $n^2 - 20n + 103 = 7$

17) $n^2 - 2n - 54 = 9$

18) $x^2 - 4x - 25 = -8$

19) $n^2 - 18n + 12 = -5$

20) $p^2 - 10p - 30 = -3$

21) $x^2 + 18x - 28 = 4$

22) $p^2 + 14p + 45 = 5$

23) $x^2 - 20x - 25 = -4$

24) $v^2 + 6v - 62 = 10$

Algebra 1   Name_____

Assignment

Date_____ Period_____

Solve each equation by completing the square.

1) $x^2 - 12x - 73 = -9$

  {16, −4}

2) $m^2 - 4m - 84 = 10$

  {11.899, −7.899}

3) $n^2 - 12n + 2 = -9$

  {11, 1}

4) $k^2 - 16k + 60 = 5$

  {11, 5}

5) $x^2 - 6x - 31 = -6$

  {8.831, −2.831}

6) $p^2 + 2p - 17 = -9$

  {2, −4}

7) $x^2 + 20x + 92 = -7$

  {−9, −11}

8) $x^2 + 20x + 71 = -4$

  {−5, −15}

9) $x^2 - 6x + 14 = 9$

  {5, 1}

10) $n^2 + 16n + 37 = 9$

  {−2, −14}

11) $x^2 + 10x - 40 = -10$

  {2.416, −12.416}

12) $r^2 - 4r - 34 = -6$

  {7.657, −3.657}

13) $a^2 - 6a - 34 = 10$

  {10.28, −4.28}

14) $x^2 + 2x - 40 = -4$

  {5.083, −7.083}

15) $b^2 + 18b - 46 = -6$

  {2, −20}

16) $n^2 - 20n + 103 = 7$

  {12, 8}

17) $n^2 - 2n - 54 = 9$

  {9, −7}

18) $x^2 - 4x - 25 = -8$

  {6.583, −2.583}

19) $n^2 - 18n + 12 = -5$

  {17, 1}

20) $p^2 - 10p - 30 = -3$

  {12.211, −2.211}

21) $x^2 + 18x - 28 = 4$

  {1.63, −19.63}

22) $p^2 + 14p + 45 = 5$

  {−4, −10}

23) $x^2 - 20x - 25 = -4$

  {21, −1}

24) $v^2 + 6v - 62 = 10$

  {6, −12}

Algebra 1   Name_____

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Solve each equation by completing the square.

1) $x^2 + 12x - 106 = -7$

2) $x^2 + 18x + 51 = -5$

3) $x^2 + 16x - 6 = -9$

4) $p^2 + 16p + 43 = -3$

5) $k^2 - 6k - 38 = 2$

6) $x^2 + 16x + 46 = -2$

7) $k^2 - 4k - 4 = 8$

8) $n^2 + 14n + 30 = 6$

9) $x^2 - 8x - 72 = -2$

10) $x^2 + 20x + 81 = -10$

11) $r^2 + 16r + 49 = 10$

12) $v^2 - 10v + 16 = -5$

13) $n^2 - 8n + 20 = 10$

14) $n^2 - 12n - 17 = -4$

15) $n^2 - 6n - 60 = -5$

16) $a^2 + 6a - 1 = 6$

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

18) $r^2 + 18r - 89 = 5$

19) $n^2 - 6n - 40 = 9$

20) $n^2 - 14n + 46 = -2$

21) $k^2 - 18k - 104 = -6$

22) $x^2 + 14x - 46 = 6$

23) $x^2 - 18x + 46 = -10$

24) $v^2 + 2v - 53 = -3$

Algebra 1   Name_____

Assignment

Date_____ Period_____

Solve each equation by completing the square.

1) $x^2 + 12x - 106 = -7$

   {5.619, −17.619}

2) $x^2 + 18x + 51 = -5$

   {−4, −14}

3) $x^2 + 16x - 6 = -9$

   {−0.19, −15.81}

4) $p^2 + 16p + 43 = -3$

   {−3.757, −12.243}

5) $k^2 - 6k - 38 = 2$

   {10, −4}

6) $x^2 + 16x + 46 = -2$

   {−4, −12}

7) $k^2 - 4k - 4 = 8$

   {6, −2}

8) $n^2 + 14n + 30 = 6$

   {−2, −12}

9) $x^2 - 8x - 72 = -2$

   {13.274, −5.274}

10) $x^2 + 20x + 81 = -10$

   {−7, −13}

11) $r^2 + 16r + 49 = 10$

   {−3, −13}

12) $v^2 - 10v + 16 = -5$

   {7, 3}

13) $n^2 - 8n + 20 = 10$

   {6.449, 1.551}

14) $n^2 - 12n - 17 = -4$

   {13, −1}

15) $n^2 - 6n - 60 = -5$

   {11, −5}

16) $a^2 + 6a - 1 = 6$

   {1, −7}

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

   {5, 3}

18) $r^2 + 18r - 89 = 5$

   {4.229, −22.229}

19) $n^2 - 6n - 40 = 9$

   {10.616, −4.616}

20) $n^2 - 14n + 46 = -2$

   {8, 6}

21) $k^2 - 18k - 104 = -6$

   {22.379, −4.379}

22) $x^2 + 14x - 46 = 6$

   {3.05, −17.05}

23) $x^2 - 18x + 46 = -10$

   {14, 4}

24) $v^2 + 2v - 53 = -3$

   {6.141, −8.141}

Algebra 1   Name_____

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Solve each equation by completing the square.

1) $n^2 - 20n - 54 = -5$

2) $v^2 + 8v - 49 = 6$

3) $n^2 - 2n - 33 = 2$

4) $m^2 - 20m + 46 = 10$

5) $x^2 + 20x - 87 = -2$

6) $n^2 + 8n - 88 = -7$

7) $n^2 - 8n + 6 = -9$

8) $x^2 - 4x - 69 = -9$

9) $x^2 + 20x + 7 = 5$

10) $x^2 + 16x - 63 = 2$

11) $b^2 - 14b - 79 = 8$

12) $r^2 + 6r - 30 = 10$

13) $n^2 - 6n - 3 = -8$

14) $x^2 + 8x - 10 = 10$

15) $n^2 - 6n - 20 = 9$

16) $r^2 + 14r - 78 = -6$

17) $n^2 - 16n + 46 = -9$

18) $x^2 + 4x - 2 = 3$

19) $n^2 + 14n + 20 = -4$

20) $p^2 + 18p + 87 = 10$

21) $n^2 + 12n + 8 = -3$

22) $p^2 + 2p - 56 = -8$

23) $x^2 - 10x - 30 = 6$

24) $r^2 + 8r - 30 = 6$

Algebra 1   Name_____

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Solve each equation by completing the square.

1) $n^2 - 20n - 54 = -5$

   {22.207, −2.207}

2) $v^2 + 8v - 49 = 6$

   {4.426, −12.426}

3) $n^2 - 2n - 33 = 2$

   {7, −5}

4) $m^2 - 20m + 46 = 10$

   {18, 2}

5) $x^2 + 20x - 87 = -2$

   {3.601, −23.601}

6) $n^2 + 8n - 88 = -7$

   {5.849, −13.849}

7) $n^2 - 8n + 6 = -9$

   {5, 3}

8) $x^2 - 4x - 69 = -9$

   {10, −6}

9) $x^2 + 20x + 7 = 5$

   {−0.101, −19.899}

10) $x^2 + 16x - 63 = 2$

   {3.358, −19.358}

11) $b^2 - 14b - 79 = 8$

   {18.662, −4.662}

12) $r^2 + 6r - 30 = 10$

   {4, −10}

13) $n^2 - 6n - 3 = -8$

   {5, 1}

14) $x^2 + 8x - 10 = 10$

   {2, −10}

15) $n^2 - 6n - 20 = 9$

   {9.164, −3.164}

16) $r^2 + 14r - 78 = -6$

   {4, −18}

17) $n^2 - 16n + 46 = -9$

   {11, 5}

18) $x^2 + 4x - 2 = 3$

   {1, −5}

19) $n^2 + 14n + 20 = -4$

   {−2, −12}

20) $p^2 + 18p + 87 = 10$

   {−7, −11}

21) $n^2 + 12n + 8 = -3$

   {−1, −11}

22) $p^2 + 2p - 56 = -8$

   {6, −8}

23) $x^2 - 10x - 30 = 6$

   {12.81, −2.81}

24) $r^2 + 8r - 30 = 6$

   {3.211, −11.211}

Algebra 1   Name_____

Assignment

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Solve each equation by completing the square.

1) $x^2 - 12x + 9 = -5$

2) $n^2 + 20n - 29 = -8$

3) $k^2 - 14k + 45 = 5$

4) $p^2 + 20p - 59 = -4$

5) $a^2 + 6a + 4 = -4$

6) $x^2 + 6x - 3 = 7$

7) $a^2 - 16a + 59 = 4$

8) $m^2 - 14m + 42 = -3$

9) $b^2 + 12b - 8 = 5$

10) $x^2 - 20x + 81 = -4$

11) $k^2 - 4k - 93 = 3$

12) $v^2 + 20v + 78 = -10$

13) $x^2 + 20x - 22 = -6$

14) $a^2 - 6a - 64 = 8$

15) $x^2 - 6x - 23 = 4$

16) $x^2 + 2x - 4 = -3$

17) $n^2 + 6n - 5 = -10$

18) $x^2 + 10x + 14 = -2$

19) $a^2 + 8a - 46 = 2$

20) $p^2 - 8p - 29 = 4$

21) $n^2 - 6n - 24 = -3$

22) $k^2 + 2k - 66 = -10$

23) $n^2 + 16n - 62 = -5$

24) $r^2 - 4r - 15 = -5$

Algebra 1   Name_____

Assignment
                                             Date_____ Period_____

Solve each equation by completing the square.

1) $x^2 - 12x + 9 = -5$

   $\{10.69, 1.31\}$

2) $n^2 + 20n - 29 = -8$

   $\{1, -21\}$

3) $k^2 - 14k + 45 = 5$

   $\{10, 4\}$

4) $p^2 + 20p - 59 = -4$

   $\{2.45, -22.45\}$

5) $a^2 + 6a + 4 = -4$

   $\{-2, -4\}$

6) $x^2 + 6x - 3 = 7$

   $\{1.359, -7.359\}$

7) $a^2 - 16a + 59 = 4$

   $\{11, 5\}$

8) $m^2 - 14m + 42 = -3$

   $\{9, 5\}$

9) $b^2 + 12b - 8 = 5$

   $\{1, -13\}$

10) $x^2 - 20x + 81 = -4$

    $\{13.873, 6.127\}$

11) $k^2 - 4k - 93 = 3$

    $\{12, -8\}$

12) $v^2 + 20v + 78 = -10$

    $\{-6.536, -13.464\}$

13) $x^2 + 20x - 22 = -6$

    $\{0.77, -20.77\}$

14) $a^2 - 6a - 64 = 8$

    $\{12, -6\}$

15) $x^2 - 6x - 23 = 4$

    $\{9, -3\}$

16) $x^2 + 2x - 4 = -3$

    $\{0.414, -2.414\}$

17) $n^2 + 6n - 5 = -10$

    $\{-1, -5\}$

18) $x^2 + 10x + 14 = -2$

    $\{-2, -8\}$

19) $a^2 + 8a - 46 = 2$

    $\{4, -12\}$

20) $p^2 - 8p - 29 = 4$

    $\{11, -3\}$

21) $n^2 - 6n - 24 = -3$

    $\{8.477, -2.477\}$

22) $k^2 + 2k - 66 = -10$

    $\{6.55, -8.55\}$

23) $n^2 + 16n - 62 = -5$

    $\{3, -19\}$

24) $r^2 - 4r - 15 = -5$

    $\{5.742, -1.742\}$

Algebra 1   Name_____

Assignment   Date_____ Period_____

Solve each equation by completing the square.

1) $m^2 + 2m - 101 = -3$

2) $b^2 + 6b - 9 = -2$

3) $n^2 + 12n - 57 = -2$

4) $p^2 + 18p - 59 = -3$

5) $k^2 - 6k - 33 = -6$

6) $p^2 - 20p - 75 = -6$

7) $n^2 - 12n + 18 = -10$

8) $x^2 - 4x - 39 = 3$

9) $b^2 - 8b - 67 = -2$

10) $v^2 - 4v - 74 = -10$

11) $p^2 + 8p - 26 = 7$

12) $k^2 - 14k - 88 = 7$

13) $n^2 + 6n - 42 = -2$

14) $x^2 + 18x + 50 = -7$

15) $n^2 + 8n + 22 = 7$

16) $x^2 + 16x - 74 = -6$

17) $n^2 - 6n - 91 = 4$

18) $p^2 + 16p + 51 = -6$

19) $v^2 + 4v - 51 = 9$

20) $r^2 + 12r - 62 = 2$

21) $m^2 - 18m + 79 = 4$

22) $b^2 + 8b - 65 = 3$

23) $b^2 - 2b - 94 = -8$

24) $m^2 + 16m + 17 = 2$

Algebra 1   Name_____

Assignment   Date_____ Period_____

Solve each equation by completing the square.

1) $m^2 + 2m - 101 = -3$

  {8.95, −10.95}

2) $b^2 + 6b - 9 = -2$

  {1, −7}

3) $n^2 + 12n - 57 = -2$

  {3.539, −15.539}

4) $p^2 + 18p - 59 = -3$

  {2.705, −20.705}

5) $k^2 - 6k - 33 = -6$

  {9, −3}

6) $p^2 - 20p - 75 = -6$

  {23, −3}

7) $n^2 - 12n + 18 = -10$

  {8.828, 3.172}

8) $x^2 - 4x - 39 = 3$

  {8.782, −4.782}

9) $b^2 - 8b - 67 = -2$

  {13, −5}

10) $v^2 - 4v - 74 = -10$

  {10.246, −6.246}

11) $p^2 + 8p - 26 = 7$

  {3, −11}

12) $k^2 - 14k - 88 = 7$

  {19, −5}

13) $n^2 + 6n - 42 = -2$

  {4, −10}

14) $x^2 + 18x + 50 = -7$

  {−4.101, −13.899}

15) $n^2 + 8n + 22 = 7$

  {−3, −5}

16) $x^2 + 16x - 74 = -6$

  {3.489, −19.489}

17) $n^2 - 6n - 91 = 4$

  {13.198, −7.198}

18) $p^2 + 16p + 51 = -6$

  {−5.354, −10.646}

19) $v^2 + 4v - 51 = 9$

  {6, −10}

20) $r^2 + 12r - 62 = 2$

  {4, −16}

21) $m^2 - 18m + 79 = 4$

  {11.449, 6.551}

22) $b^2 + 8b - 65 = 3$

  {5.165, −13.165}

23) $b^2 - 2b - 94 = -8$

  {10.327, −8.327}

24) $m^2 + 16m + 17 = 2$

  {−1, −15}

Algebra 1   Name_____

Assignment   Date_____ Period_____

Solve each equation by completing the square.

1) $p^2 + 6p - 27 = -9$

2) $n^2 + 18n - 33 = 7$

3) $b^2 + 14b - 68 = -10$

4) $k^2 - 18k + 86 = 6$

5) $x^2 + 16x + 9 = -6$

6) $n^2 + 20n - 104 = -8$

7) $x^2 - 12x + 11 = -9$

8) $x^2 + 16x + 10 = 3$

9) $r^2 + 6r - 13 = 9$

10) $v^2 - 4v - 102 = -6$

11) $a^2 + 16a + 64 = 4$

12) $n^2 - 12n + 7 = 5$

13) $r^2 - 18r + 41 = -4$

14) $v^2 - 14v - 35 = -3$

15) $a^2 - 12a - 35 = 3$

16) $v^2 + 10v - 31 = 8$

17) $v^2 - 2v - 46 = 9$

18) $r^2 + 8r + 2 = -10$

19) $x^2 - 18x + 72 = 7$

20) $r^2 + 10r + 13 = -3$

21) $k^2 - 4k - 14 = -9$

22) $k^2 - 2k - 58 = 6$

23) $x^2 - 12x - 60 = 2$

24) $m^2 - 20m + 61 = -3$

Algebra 1   Name_____

Assignment   Date_____ Period____

Solve each equation by completing the square.

1) $p^2 + 6p - 27 = -9$

   {2.196, −8.196}

2) $n^2 + 18n - 33 = 7$

   {2, −20}

3) $b^2 + 14b - 68 = -10$

   {3.344, −17.344}

4) $k^2 - 18k + 86 = 6$

   {10, 8}

5) $x^2 + 16x + 9 = -6$

   {−1, −15}

6) $n^2 + 20n - 104 = -8$

   {4, −24}

7) $x^2 - 12x + 11 = -9$

   {10, 2}

8) $x^2 + 16x + 10 = 3$

   {−0.45, −15.55}

9) $r^2 + 6r - 13 = 9$

   {2.568, −8.568}

10) $v^2 - 4v - 102 = -6$

   {12, −8}

11) $a^2 + 16a + 64 = 4$

   {−6, −10}

12) $n^2 - 12n + 7 = 5$

   {11.831, 0.169}

13) $r^2 - 18r + 41 = -4$

   {15, 3}

14) $v^2 - 14v - 35 = -3$

   {16, −2}

15) $a^2 - 12a - 35 = 3$

   {14.602, −2.602}

16) $v^2 + 10v - 31 = 8$

   {3, −13}

17) $v^2 - 2v - 46 = 9$

   {8.483, −6.483}

18) $r^2 + 8r + 2 = -10$

   {−2, −6}

19) $x^2 - 18x + 72 = 7$

   {13, 5}

20) $r^2 + 10r + 13 = -3$

   {−2, −8}

21) $k^2 - 4k - 14 = -9$

   {5, −1}

22) $k^2 - 2k - 58 = 6$

   {9.062, −7.062}

23) $x^2 - 12x - 60 = 2$

   {15.899, −3.899}

24) $m^2 - 20m + 61 = -3$

   {16, 4}