

# Résolution d'Équations Quadratiques (A)

Calculer les solutions des équations suivantes.

1.  $x^2 - 3x - 28 = 0$

7.  $2x^2 + 13x + 20 = 0$

2.  $-4x^2 - 28x - 48 = 0$

8.  $2x^2 - x - 3 = 0$

3.  $-2x^2 - 7x - 3 = 0$

9.  $-2x^2 + 4x + 6 = 0$

4.  $-2x^2 - 3x - 1 = 0$

10.  $-2x^2 - 2x + 4 = 0$

5.  $2x^2 + 9x + 9 = 0$

11.  $x^2 + 4x - 45 = 0$

6.  $2x^2 - 22x + 48 = 0$

12.  $-2x^2 - 20x - 42 = 0$

## Résolution d'Équations Quadratiques (A) Réponses

Calculer les solutions des équations suivantes.

1.  $x^2 - 3x - 28 = 0$   
 $(x - 7)(x + 4) = 0$   
 $x = 7, -4$

7.  $2x^2 + 13x + 20 = 0$   
 $(2x + 5)(x + 4) = 0$   
 $x = -2 \frac{1}{2}, -4$

2.  $-4x^2 - 28x - 48 = 0$   
 $(2x + 6)(2x + 8) = 0$   
 $x = -3, -4$

8.  $2x^2 - x - 3 = 0$   
 $(2x - 3)(x + 1) = 0$   
 $x = 1 \frac{1}{2}, -1$

3.  $-2x^2 - 7x - 3 = 0$   
 $(x + 3)(2x + 1) = 0$   
 $x = -3, -\frac{1}{2}$

9.  $-2x^2 + 4x + 6 = 0$   
 $-(2x + 2)(x - 3) = 0$   
 $x = -1, 3$

4.  $-2x^2 - 3x - 1 = 0$   
 $-(2x + 1)(x + 1) = 0$   
 $x = -\frac{1}{2}, -1$

10.  $-2x^2 - 2x + 4 = 0$   
 $-(2x - 2)(x + 2) = 0$   
 $x = 1, -2$

5.  $2x^2 + 9x + 9 = 0$   
 $(2x + 3)(x + 3) = 0$   
 $x = -1 \frac{1}{2}, -3$

11.  $x^2 + 4x - 45 = 0$   
 $(x + 9)(x - 5) = 0$   
 $x = -9, 5$

6.  $2x^2 - 22x + 48 = 0$   
 $(2x - 6)(x - 8) = 0$   
 $x = 3, 8$

12.  $-2x^2 - 20x - 42 = 0$   
 $-(2x + 6)(x + 7) = 0$   
 $x = -3, -7$

# Résolution d'Équations Quadratiques (B)

Calculer les solutions des équations suivantes.

1.  $2x^2 - 2x - 40 = 0$

7.  $x^2 - 4x - 45 = 0$

2.  $-2x^2 + 16x - 32 = 0$

8.  $x^2 - 9x + 14 = 0$

3.  $-2x^2 + 14x - 24 = 0$

9.  $2x^2 - 11x - 40 = 0$

4.  $4x^2 - 10x - 6 = 0$

10.  $x^2 - 2x + 1 = 0$

5.  $-2x^2 + 6x + 8 = 0$

11.  $-4x^2 - 20x - 25 = 0$

6.  $-2x^2 - 5x + 63 = 0$

12.  $-x^2 - 8x - 15 = 0$

## Résolution d'Équations Quadratiques (B) Réponses

Calculer les solutions des équations suivantes.

1.  $2x^2 - 2x - 40 = 0$   
 $(2x + 8)(x - 5) = 0$   
 $x = -4, 5$

7.  $x^2 - 4x - 45 = 0$   
 $(x + 5)(x - 9) = 0$   
 $x = -5, 9$

2.  $-2x^2 + 16x - 32 = 0$   
 $(x - 4)(2x - 8) = 0$   
 $x = 4$

8.  $x^2 - 9x + 14 = 0$   
 $(x - 7)(x - 2) = 0$   
 $x = 7, 2$

3.  $-2x^2 + 14x - 24 = 0$   
 $(2x - 8)(x - 3) = 0$   
 $x = 4, 3$

9.  $2x^2 - 11x - 40 = 0$   
 $(x - 8)(2x + 5) = 0$   
 $x = 8, -2 \frac{1}{2}$

4.  $4x^2 - 10x - 6 = 0$   
 $(2x + 1)(2x - 6) = 0$   
 $x = -\frac{1}{2}, 3$

10.  $x^2 - 2x + 1 = 0$   
 $(x - 1)(x - 1) = 0$   
 $x = 1$

5.  $-2x^2 + 6x + 8 = 0$   
 $(2x + 2)(x - 4) = 0$   
 $x = -1, 4$

11.  $-4x^2 - 20x - 25 = 0$   
 $-(2x + 5)(2x + 5) = 0$   
 $x = -2 \frac{1}{2}$

6.  $-2x^2 - 5x + 63 = 0$   
 $(x + 7)(2x - 9) = 0$   
 $x = -7, 4 \frac{1}{2}$

12.  $-x^2 - 8x - 15 = 0$   
 $-(x + 5)(x + 3) = 0$   
 $x = -5, -3$

# Résolution d'Équations Quadratiques (C)

Calculer les solutions des équations suivantes.

1.  $x^2 + 13x + 42 = 0$

7.  $-4x^2 + 6x - 2 = 0$

2.  $-2x^2 + 10x + 72 = 0$

8.  $-x^2 - 3x + 18 = 0$

3.  $2x^2 + 19x + 24 = 0$

9.  $2x^2 - 20x + 32 = 0$

4.  $-4x^2 - 18x - 14 = 0$

10.  $x^2 + x - 2 = 0$

5.  $x^2 - 2x - 15 = 0$

11.  $-4x^2 - 4x + 24 = 0$

6.  $4x^2 + 12x + 5 = 0$

12.  $x^2 - 4x + 3 = 0$

## Résolution d'Équations Quadratiques (C) Réponses

Calculer les solutions des équations suivantes.

1.  $x^2 + 13x + 42 = 0$   
 $(x + 6)(x + 7) = 0$   
 $x = -6, -7$

7.  $-4x^2 + 6x - 2 = 0$   
 $-(2x - 2)(2x - 1) = 0$   
 $x = 1, 1/2$

2.  $-2x^2 + 10x + 72 = 0$   
 $(2x + 8)(x - 9) = 0$   
 $x = -4, 9$

8.  $-x^2 - 3x + 18 = 0$   
 $-(x - 3)(x + 6) = 0$   
 $x = 3, -6$

3.  $2x^2 + 19x + 24 = 0$   
 $(x + 8)(2x + 3) = 0$   
 $x = -8, -1 1/2$

9.  $2x^2 - 20x + 32 = 0$   
 $(2x - 4)(x - 8) = 0$   
 $x = 2, 8$

4.  $-4x^2 - 18x - 14 = 0$   
 $-(2x + 2)(2x + 7) = 0$   
 $x = -1, -3 1/2$

10.  $x^2 + x - 2 = 0$   
 $(x + 2)(x - 1) = 0$   
 $x = -2, 1$

5.  $x^2 - 2x - 15 = 0$   
 $(x + 3)(x - 5) = 0$   
 $x = -3, 5$

11.  $-4x^2 - 4x + 24 = 0$   
 $-(2x + 6)(2x - 4) = 0$   
 $x = -3, 2$

6.  $4x^2 + 12x + 5 = 0$   
 $(2x + 1)(2x + 5) = 0$   
 $x = -1/2, -2 1/2$

12.  $x^2 - 4x + 3 = 0$   
 $(x - 3)(x - 1) = 0$   
 $x = 3, 1$

# Résolution d'Équations Quadratiques (D)

Calculer les solutions des équations suivantes.

1.  $2x^2 - 17x + 30 = 0$

7.  $-4x^2 + 8x + 5 = 0$

2.  $-2x^2 + 21x - 27 = 0$

8.  $4x^2 - 8x - 32 = 0$

3.  $-x^2 - 2x - 1 = 0$

9.  $-2x^2 - 16x + 18 = 0$

4.  $2x^2 - 16x + 32 = 0$

10.  $-x^2 + x + 72 = 0$

5.  $2x^2 - 3x - 54 = 0$

11.  $x^2 - 10x + 24 = 0$

6.  $-4x^2 + 18x - 8 = 0$

12.  $4x^2 + 30x + 56 = 0$

## Résolution d'Équations Quadratiques (D) Réponses

Calculer les solutions des équations suivantes.

1.  $2x^2 - 17x + 30 = 0$   
 $(x - 6)(2x - 5) = 0$   
 $x = 6, 2 \frac{1}{2}$

7.  $-4x^2 + 8x + 5 = 0$   
 $-(2x + 1)(2x - 5) = 0$   
 $x = -\frac{1}{2}, 2 \frac{1}{2}$

2.  $-2x^2 + 21x - 27 = 0$   
 $(2x - 3)(x - 9) = 0$   
 $x = 1 \frac{1}{2}, 9$

8.  $4x^2 - 8x - 32 = 0$   
 $(2x + 4)(2x - 8) = 0$   
 $x = -2, 4$

3.  $-x^2 - 2x - 1 = 0$   
 $(x + 1)(x + 1) = 0$   
 $x = -1$

9.  $-2x^2 - 16x + 18 = 0$   
 $-(x + 9)(2x - 2) = 0$   
 $x = -9, 1$

4.  $2x^2 - 16x + 32 = 0$   
 $(2x - 8)(x - 4) = 0$   
 $x = 4$

10.  $-x^2 + x + 72 = 0$   
 $-(x - 9)(x + 8) = 0$   
 $x = 9, -8$

5.  $2x^2 - 3x - 54 = 0$   
 $(2x + 9)(x - 6) = 0$   
 $x = -4 \frac{1}{2}, 6$

11.  $x^2 - 10x + 24 = 0$   
 $(x - 6)(x - 4) = 0$   
 $x = 6, 4$

6.  $-4x^2 + 18x - 8 = 0$   
 $(2x - 1)(2x - 8) = 0$   
 $x = \frac{1}{2}, 4$

12.  $4x^2 + 30x + 56 = 0$   
 $(2x + 7)(2x + 8) = 0$   
 $x = -3 \frac{1}{2}, -4$



# Résolution d'Équations Quadratiques (E)

Calculer les solutions des équations suivantes.

1.  $-4x^2 + 18x - 18 = 0$

7.  $2x^2 + 10x - 48 = 0$

2.  $-2x^2 - 3x + 2 = 0$

8.  $2x^2 + 12x - 14 = 0$

3.  $-4x^2 + 2x + 72 = 0$

9.  $-2x^2 + 10x - 8 = 0$

4.  $-4x^2 + 8x - 4 = 0$

10.  $2x^2 + 18x + 28 = 0$

5.  $4x^2 - 8x - 5 = 0$

11.  $-x^2 - 2x + 15 = 0$

6.  $x^2 + 3x - 4 = 0$

12.  $-4x^2 + 12x + 7 = 0$

## Résolution d'Équations Quadratiques (E) Réponses

Calculer les solutions des équations suivantes.

1.  $-4x^2 + 18x - 18 = 0$   
 $-(2x - 6)(2x - 3) = 0$   
 $x = 3, 1\frac{1}{2}$

7.  $2x^2 + 10x - 48 = 0$   
 $(x + 8)(2x - 6) = 0$   
 $x = -8, 3$

2.  $-2x^2 - 3x + 2 = 0$   
 $(x + 2)(2x - 1) = 0$   
 $x = -2, \frac{1}{2}$

8.  $2x^2 + 12x - 14 = 0$   
 $(2x - 2)(x + 7) = 0$   
 $x = 1, -7$

3.  $-4x^2 + 2x + 72 = 0$   
 $(2x - 9)(2x + 8) = 0$   
 $x = 4\frac{1}{2}, -4$

9.  $-2x^2 + 10x - 8 = 0$   
 $-(2x - 8)(x - 1) = 0$   
 $x = 4, 1$

4.  $-4x^2 + 8x - 4 = 0$   
 $-(2x - 2)(2x - 2) = 0$   
 $x = 1$

10.  $2x^2 + 18x + 28 = 0$   
 $(x + 7)(2x + 4) = 0$   
 $x = -7, -2$

5.  $4x^2 - 8x - 5 = 0$   
 $(2x + 1)(2x - 5) = 0$   
 $x = -\frac{1}{2}, 2\frac{1}{2}$

11.  $-x^2 - 2x + 15 = 0$   
 $-(x - 3)(x + 5) = 0$   
 $x = 3, -5$

6.  $x^2 + 3x - 4 = 0$   
 $(x - 1)(x + 4) = 0$   
 $x = 1, -4$

12.  $-4x^2 + 12x + 7 = 0$   
 $-(2x - 7)(2x + 1) = 0$   
 $x = 3\frac{1}{2}, -\frac{1}{2}$

# Résolution d'Équations Quadratiques (F)

Calculer les solutions des équations suivantes.

1.  $-2x^2 - 10x + 48 = 0$

7.  $-2x^2 + 22x - 36 = 0$

2.  $2x^2 - 16x + 14 = 0$

8.  $-2x^2 - 5x - 3 = 0$

3.  $-2x^2 - 14x - 12 = 0$

9.  $-x^2 + 15x - 54 = 0$

4.  $2x^2 - 17x + 8 = 0$

10.  $2x^2 - 8x - 42 = 0$

5.  $-x^2 + 4x + 21 = 0$

11.  $2x^2 + 26x + 72 = 0$

6.  $-2x^2 - 16x - 14 = 0$

12.  $-2x^2 + 21x - 49 = 0$

## Résolution d'Équations Quadratiques (F) Réponses

Calculer les solutions des équations suivantes.

1.  $-2x^2 - 10x + 48 = 0$   
 $-(x + 8)(2x - 6) = 0$   
 $x = -8, 3$

7.  $-2x^2 + 22x - 36 = 0$   
 $-(x - 9)(2x - 4) = 0$   
 $x = 9, 2$

2.  $2x^2 - 16x + 14 = 0$   
 $(x - 7)(2x - 2) = 0$   
 $x = 7, 1$

8.  $-2x^2 - 5x - 3 = 0$   
 $-(2x + 3)(x + 1) = 0$   
 $x = -1 \frac{1}{2}, -1$

3.  $-2x^2 - 14x - 12 = 0$   
 $(2x + 2)(x + 6) = 0$   
 $x = -1, -6$

9.  $-x^2 + 15x - 54 = 0$   
 $-(x - 6)(x - 9) = 0$   
 $x = 6, 9$

4.  $2x^2 - 17x + 8 = 0$   
 $(x - 8)(2x - 1) = 0$   
 $x = 8, \frac{1}{2}$

10.  $2x^2 - 8x - 42 = 0$   
 $(2x + 6)(x - 7) = 0$   
 $x = -3, 7$

5.  $-x^2 + 4x + 21 = 0$   
 $(x - 7)(x + 3) = 0$   
 $x = 7, -3$

11.  $2x^2 + 26x + 72 = 0$   
 $(2x + 8)(x + 9) = 0$   
 $x = -4, -9$

6.  $-2x^2 - 16x - 14 = 0$   
 $(2x + 2)(x + 7) = 0$   
 $x = -1, -7$

12.  $-2x^2 + 21x - 49 = 0$   
 $-(x - 7)(2x - 7) = 0$   
 $x = 7, 3 \frac{1}{2}$

# Résolution d'Équations Quadratiques (G)

Calculer les solutions des équations suivantes.

1.  $-2x^2 + 2x + 4 = 0$

7.  $x^2 - 5x - 6 = 0$

2.  $-x^2 - 2x + 3 = 0$

8.  $4x^2 + 6x - 54 = 0$

3.  $-2x^2 - 3x + 27 = 0$

9.  $-x^2 - 11x - 30 = 0$

4.  $x^2 - 7x + 6 = 0$

10.  $-2x^2 + 21x - 27 = 0$

5.  $-x^2 + 2x + 48 = 0$

11.  $x^2 + 18x + 81 = 0$

6.  $-2x^2 - 20x - 48 = 0$

12.  $-2x^2 + 6x + 36 = 0$

## Résolution d'Équations Quadratiques (G) Réponses

Calculer les solutions des équations suivantes.

1.  $-2x^2 + 2x + 4 = 0$   
 $-(2x + 2)(x - 2) = 0$   
 $x = -1, 2$

7.  $x^2 - 5x - 6 = 0$   
 $(x + 1)(x - 6) = 0$   
 $x = -1, 6$

2.  $-x^2 - 2x + 3 = 0$   
 $(x + 3)(x - 1) = 0$   
 $x = -3, 1$

8.  $4x^2 + 6x - 54 = 0$   
 $(2x - 6)(2x + 9) = 0$   
 $x = 3, -4 \frac{1}{2}$

3.  $-2x^2 - 3x + 27 = 0$   
 $(2x + 9)(x - 3) = 0$   
 $x = -4 \frac{1}{2}, 3$

9.  $-x^2 - 11x - 30 = 0$   
 $-(x + 6)(x + 5) = 0$   
 $x = -6, -5$

4.  $x^2 - 7x + 6 = 0$   
 $(x - 6)(x - 1) = 0$   
 $x = 6, 1$

10.  $-2x^2 + 21x - 27 = 0$   
 $-(x - 9)(2x - 3) = 0$   
 $x = 9, 1 \frac{1}{2}$

5.  $-x^2 + 2x + 48 = 0$   
 $(x + 6)(x - 8) = 0$   
 $x = -6, 8$

11.  $x^2 + 18x + 81 = 0$   
 $(x + 9)(x + 9) = 0$   
 $x = -9$

6.  $-2x^2 - 20x - 48 = 0$   
 $(x + 6)(2x + 8) = 0$   
 $x = -6, -4$

12.  $-2x^2 + 6x + 36 = 0$   
 $-(2x + 6)(x - 6) = 0$   
 $x = -3, 6$

# Résolution d'Équations Quadratiques (H)

Calculer les solutions des équations suivantes.

1.  $2x^2 + x - 45 = 0$

7.  $x^2 + 4x - 12 = 0$

2.  $x^2 + 2x - 48 = 0$

8.  $-2x^2 + 11x - 15 = 0$

3.  $2x^2 - 18x + 16 = 0$

9.  $x^2 - 8x + 16 = 0$

4.  $-x^2 + 2x + 35 = 0$

10.  $4x^2 - 6x - 10 = 0$

5.  $-2x^2 - 7x + 72 = 0$

11.  $x^2 - 8x + 12 = 0$

6.  $-x^2 - 8x - 15 = 0$

12.  $4x^2 + 18x + 14 = 0$

## Résolution d'Équations Quadratiques (H) Réponses

Calculer les solutions des équations suivantes.

1.  $2x^2 + x - 45 = 0$   
 $(x + 5)(2x - 9) = 0$   
 $x = -5, 4 \frac{1}{2}$

7.  $x^2 + 4x - 12 = 0$   
 $(x - 2)(x + 6) = 0$   
 $x = 2, -6$

2.  $x^2 + 2x - 48 = 0$   
 $(x - 6)(x + 8) = 0$   
 $x = 6, -8$

8.  $-2x^2 + 11x - 15 = 0$   
 $-(x - 3)(2x - 5) = 0$   
 $x = 3, 2 \frac{1}{2}$

3.  $2x^2 - 18x + 16 = 0$   
 $(x - 8)(2x - 2) = 0$   
 $x = 8, 1$

9.  $x^2 - 8x + 16 = 0$   
 $(x - 4)(x - 4) = 0$   
 $x = 4$

4.  $-x^2 + 2x + 35 = 0$   
 $-(x - 7)(x + 5) = 0$   
 $x = 7, -5$

10.  $4x^2 - 6x - 10 = 0$   
 $(2x - 5)(2x + 2) = 0$   
 $x = 2 \frac{1}{2}, -1$

5.  $-2x^2 - 7x + 72 = 0$   
 $(x + 8)(2x - 9) = 0$   
 $x = -8, 4 \frac{1}{2}$

11.  $x^2 - 8x + 12 = 0$   
 $(x - 6)(x - 2) = 0$   
 $x = 6, 2$

6.  $-x^2 - 8x - 15 = 0$   
 $(x + 3)(x + 5) = 0$   
 $x = -3, -5$

12.  $4x^2 + 18x + 14 = 0$   
 $(2x + 7)(2x + 2) = 0$   
 $x = -3 \frac{1}{2}, -1$



# Résolution d'Équations Quadratiques (I)

Calculer les solutions des équations suivantes.

1.  $4x^2 + 8x - 45 = 0$

7.  $2x^2 - 12x - 14 = 0$

2.  $-4x^2 - 10x + 6 = 0$

8.  $4x^2 + 10x + 6 = 0$

3.  $2x^2 + 16x + 14 = 0$

9.  $-2x^2 - 7x + 49 = 0$

4.  $x^2 - 6x - 7 = 0$

10.  $-2x^2 + x + 15 = 0$

5.  $2x^2 - 19x + 42 = 0$

11.  $2x^2 + 2x - 4 = 0$

6.  $2x^2 + 13x + 18 = 0$

12.  $2x^2 - 14x + 12 = 0$

## Résolution d'Équations Quadratiques (I) Réponses

Calculer les solutions des équations suivantes.

1.  $4x^2 + 8x - 45 = 0$   
 $(2x - 5)(2x + 9) = 0$   
 $x = 2 \frac{1}{2}, -4 \frac{1}{2}$

7.  $2x^2 - 12x - 14 = 0$   
 $(x - 7)(2x + 2) = 0$   
 $x = 7, -1$

2.  $-4x^2 - 10x + 6 = 0$   
 $(2x - 1)(2x + 6) = 0$   
 $x = \frac{1}{2}, -3$

8.  $4x^2 + 10x + 6 = 0$   
 $(2x + 3)(2x + 2) = 0$   
 $x = -1 \frac{1}{2}, -1$

3.  $2x^2 + 16x + 14 = 0$   
 $(x + 7)(2x + 2) = 0$   
 $x = -7, -1$

9.  $-2x^2 - 7x + 49 = 0$   
 $-(x + 7)(2x - 7) = 0$   
 $x = -7, 3 \frac{1}{2}$

4.  $x^2 - 6x - 7 = 0$   
 $(x + 1)(x - 7) = 0$   
 $x = -1, 7$

10.  $-2x^2 + x + 15 = 0$   
 $-(2x + 5)(x - 3) = 0$   
 $x = -2 \frac{1}{2}, 3$

5.  $2x^2 - 19x + 42 = 0$   
 $(x - 6)(2x - 7) = 0$   
 $x = 6, 3 \frac{1}{2}$

11.  $2x^2 + 2x - 4 = 0$   
 $(x + 2)(2x - 2) = 0$   
 $x = -2, 1$

6.  $2x^2 + 13x + 18 = 0$   
 $(x + 2)(2x + 9) = 0$   
 $x = -2, -4 \frac{1}{2}$

12.  $2x^2 - 14x + 12 = 0$   
 $(x - 6)(2x - 2) = 0$   
 $x = 6, 1$

# Résolution d'Équations Quadratiques (J)

Calculer les solutions des équations suivantes.

1.  $x^2 + 3x - 40 = 0$

7.  $x^2 - 6x - 16 = 0$

2.  $-2x^2 + 13x + 7 = 0$

8.  $-2x^2 + 14x - 24 = 0$

3.  $2x^2 - 2x - 4 = 0$

9.  $2x^2 - 9x + 10 = 0$

4.  $-2x^2 - x + 15 = 0$

10.  $4x^2 + 8x - 45 = 0$

5.  $-2x^2 + x + 1 = 0$

11.  $-2x^2 + 11x + 6 = 0$

6.  $2x^2 + 15x + 27 = 0$

12.  $-2x^2 + 18 = 0$

## Résolution d'Équations Quadratiques (J) Réponses

Calculer les solutions des équations suivantes.

1.  $x^2 + 3x - 40 = 0$   
 $(x + 8)(x - 5) = 0$   
 $x = -8, 5$

7.  $x^2 - 6x - 16 = 0$   
 $(x - 8)(x + 2) = 0$   
 $x = 8, -2$

2.  $-2x^2 + 13x + 7 = 0$   
 $(2x + 1)(x - 7) = 0$   
 $x = -1/2, 7$

8.  $-2x^2 + 14x - 24 = 0$   
 $-(2x - 6)(x - 4) = 0$   
 $x = 3, 4$

3.  $2x^2 - 2x - 4 = 0$   
 $(x - 2)(2x + 2) = 0$   
 $x = 2, -1$

9.  $2x^2 - 9x + 10 = 0$   
 $(x - 2)(2x - 5) = 0$   
 $x = 2, 2\frac{1}{2}$

4.  $-2x^2 - x + 15 = 0$   
 $-(2x - 5)(x + 3) = 0$   
 $x = 2\frac{1}{2}, -3$

10.  $4x^2 + 8x - 45 = 0$   
 $(2x - 5)(2x + 9) = 0$   
 $x = 2\frac{1}{2}, -4\frac{1}{2}$

5.  $-2x^2 + x + 1 = 0$   
 $(2x + 1)(x - 1) = 0$   
 $x = -1/2, 1$

11.  $-2x^2 + 11x + 6 = 0$   
 $-(x - 6)(2x + 1) = 0$   
 $x = 6, -1/2$

6.  $2x^2 + 15x + 27 = 0$   
 $(2x + 9)(x + 3) = 0$   
 $x = -4\frac{1}{2}, -3$

12.  $-2x^2 + 18 = 0$   
 $-(x + 3)(2x - 6) = 0$   
 $x = -3, 3$