Resolver Cuadráticas (A)

Resuelva cada ecuación en función de x.

1. $45x^2 + 79x + 30 = 0$

2. $42x^2 + 40x + 8 = 0$

3. $32x^2 + 80x + 48 = 0$

4. $6x^2 + 27x + 27 = 0$

5. $4x^2 + 25x + 6 = 0$

6. $49x^2 + 77x + 30 = 0$

7. $40x^2 + 101x + 63 = 0$

8. $63x^2 + 73x + 20 = 0$

9. $7x^2 + 51x + 14 = 0$

10. $36x^2 + 42x + 12 = 0$

11. $72x^2 + 129x + 54 = 0$

12. $8x^2 + 71x + 56 = 0$

Resolver Cuadráticas (A) Respuestas

Resuelva cada ecuación en función de x.

1. $45x^2 + 79x + 30 = 0$
$(5x + 6)\ (9x + 5) = 0$
$x = -1\ 1/5,\ \ - 5/9$

2. $42x^2 + 40x + 8 = 0$
$(7x + 2)\ (6x + 4) = 0$
$x = - 2/7,\ \ - 2/3$

3. $32x^2 + 80x + 48 = 0$
$(4x + 6)\ (8x + 8) = 0$
$x = -1\ 1/2,\ \ -1$

4. $6x^2 + 27x + 27 = 0$
$(x + 3)\ (6x + 9) = 0$
$x = -3\ ,\ \ -1\ 1/2$

5. $4x^2 + 25x + 6 = 0$
$(4x + 1)\ (x + 6) = 0$
$x = - 1/4,\ \ -6$

6. $49x^2 + 77x + 30 = 0$
$(7x + 5)\ (7x + 6) = 0$
$x = - 5/7,\ \ - 6/7$

7. $40x^2 + 101x + 63 = 0$
$(8x + 9)\ (5x + 7) = 0$
$x = -1\ 1/8,\ \ -1\ 2/5$

8. $63x^2 + 73x + 20 = 0$
$(7x + 5)\ (9x + 4) = 0$
$x = - 5/7,\ \ - 4/9$

9. $7x^2 + 51x + 14 = 0$
$(7x + 2)\ (x + 7) = 0$
$x = - 2/7,\ \ -7$

10. $36x^2 + 42x + 12 = 0$
$(9x + 6)\ (4x + 2) = 0$
$x = - 2/3,\ \ - 1/2$

11. $72x^2 + 129x + 54 = 0$
$(8x + 9)\ (9x + 6) = 0$
$x = -1\ 1/8,\ \ - 2/3$

12. $8x^2 + 71x + 56 = 0$
$(8x + 7)\ (x + 8) = 0$
$x = - 7/8,\ \ -8$

Resolver Cuadráticas (B)

Resuelva cada ecuación en función de x.

1. $32x^2 + 80x + 48 = 0$
2. $45x^2 + 98x + 49 = 0$
3. $35x^2 + 84x + 49 = 0$
4. $81x^2 + 81x + 8 = 0$
5. $27x^2 + 42x + 15 = 0$
6. $3x^2 + 26x + 48 = 0$
7. $24x^2 + 54x + 27 = 0$
8. $3x^2 + 30x + 27 = 0$
9. $35x^2 + 49x + 14 = 0$
10. $6x^2 + 25x + 21 = 0$
11. $12x^2 + 46x + 14 = 0$
12. $16x^2 + 78x + 56 = 0$

Resolver Cuadráticas (B) Respuestas

Resuelva cada ecuación en función de x.

1. $32x^2 + 80x + 48 = 0$
   $(4x + 6)\ (8x + 8) = 0$
   $x = -1\ 1/2,\ \ -1$

2. $45x^2 + 98x + 49 = 0$
   $(9x + 7)\ (5x + 7) = 0$
   $x = -\ 7/9,\ \ -1\ 2/5$

3. $35x^2 + 84x + 49 = 0$
   $(7x + 7)\ (5x + 7) = 0$
   $x = -1\ ,\ \ -1\ 2/5$

4. $81x^2 + 81x + 8 = 0$
   $(9x + 8)\ (9x + 1) = 0$
   $x = -\ 8/9,\ \ -\ 1/9$

5. $27x^2 + 42x + 15 = 0$
   $(3x + 3)\ (9x + 5) = 0$
   $x = -1\ ,\ \ -\ 5/9$

6. $3x^2 + 26x + 48 = 0$
   $(3x + 8)\ (x + 6) = 0$
   $x = -2\ 2/3,\ \ -6$

7. $24x^2 + 54x + 27 = 0$
   $(6x + 9)\ (4x + 3) = 0$
   $x = -1\ 1/2,\ \ -\ 3/4$

8. $3x^2 + 30x + 27 = 0$
   $(x + 9)\ (3x + 3) = 0$
   $x = -9\ ,\ \ -1$

9. $35x^2 + 49x + 14 = 0$
   $(5x + 2)\ (7x + 7) = 0$
   $x = -\ 2/5,\ \ -1$

10. $6x^2 + 25x + 21 = 0$
    $(6x + 7)\ (x + 3) = 0$
    $x = -1\ 1/6,\ \ -3$

11. $12x^2 + 46x + 14 = 0$
    $(2x + 7)\ (6x + 2) = 0$
    $x = -3\ 1/2,\ \ -\ 1/3$

12. $16x^2 + 78x + 56 = 0$
    $(8x + 7)\ (2x + 8) = 0$
    $x = -\ 7/8,\ \ -4$

Resolver Cuadráticas (C)

Resuelva cada ecuación en función de x.

1. $5x^2 + 9x + 4 = 0$

2. $12x^2 + 51x + 45 = 0$

3. $6x^2 + 63x + 81 = 0$

4. $18x^2 + 24x + 6 = 0$

5. $35x^2 + 89x + 56 = 0$

6. $20x^2 + 43x + 21 = 0$

7. $10x^2 + 50x + 40 = 0$

8. $25x^2 + 55x + 28 = 0$

9. $6x^2 + 20x + 14 = 0$

10. $5x^2 + 16x + 3 = 0$

11. $54x^2 + 60x + 16 = 0$

12. $6x^2 + 47x + 35 = 0$

Resolver Cuadráticas (C) Respuestas

Resuelva cada ecuación en función de x.

1. $5x^2 + 9x + 4 = 0$
   $(x + 1)\ (5x + 4) = 0$
   $x = -1\ ,\ -4/5$

2. $12x^2 + 51x + 45 = 0$
   $(4x + 5)\ (3x + 9) = 0$
   $x = -1\ 1/4,\ -3$

3. $6x^2 + 63x + 81 = 0$
   $(6x + 9)\ (x + 9) = 0$
   $x = -1\ 1/2,\ -9$

4. $18x^2 + 24x + 6 = 0$
   $(9x + 3)\ (2x + 2) = 0$
   $x = -1/3,\ -1$

5. $35x^2 + 89x + 56 = 0$
   $(5x + 7)\ (7x + 8) = 0$
   $x = -1\ 2/5,\ -1\ 1/7$

6. $20x^2 + 43x + 21 = 0$
   $(5x + 7)\ (4x + 3) = 0$
   $x = -1\ 2/5,\ -3/4$

7. $10x^2 + 50x + 40 = 0$
   $(2x + 8)\ (5x + 5) = 0$
   $x = -4\ ,\ -1$

8. $25x^2 + 55x + 28 = 0$
   $(5x + 4)\ (5x + 7) = 0$
   $x = -4/5,\ -1\ 2/5$

9. $6x^2 + 20x + 14 = 0$
   $(2x + 2)\ (3x + 7) = 0$
   $x = -1\ ,\ -2\ 1/3$

10. $5x^2 + 16x + 3 = 0$
    $(5x + 1)\ (x + 3) = 0$
    $x = -1/5,\ -3$

11. $54x^2 + 60x + 16 = 0$
    $(6x + 4)\ (9x + 4) = 0$
    $x = -2/3,\ -4/9$

12. $6x^2 + 47x + 35 = 0$
    $(x + 7)\ (6x + 5) = 0$
    $x = -7\ ,\ -5/6$

Resolver Cuadráticas (D)

Resuelva cada ecuación en función de x.

1. $7x^2 + 28x + 21 = 0$
2. $45x^2 + 33x + 6 = 0$
3. $7x^2 + 61x + 40 = 0$
4. $45x^2 + 116x + 63 = 0$
5. $72x^2 + 52x + 8 = 0$
6. $36x^2 + 60x + 16 = 0$
7. $2x^2 + 16x + 30 = 0$
8. $81x^2 + 135x + 54 = 0$
9. $4x^2 + 8x + 3 = 0$
10. $14x^2 + 65x + 9 = 0$
11. $5x^2 + 23x + 12 = 0$
12. $4x^2 + 17x + 15 = 0$

Resolver Cuadráticas (D) Respuestas

Resuelva cada ecuación en función de x.

1. $7x^2 + 28x + 21 = 0$
   $(x + 3)\ (7x + 7) = 0$
   $x = -3\ ,\ -1$

2. $45x^2 + 33x + 6 = 0$
   $(5x + 2)\ (9x + 3) = 0$
   $x = -\ 2/5,\ -\ 1/3$

3. $7x^2 + 61x + 40 = 0$
   $(x + 8)\ (7x + 5) = 0$
   $x = -8\ ,\ -\ 5/7$

4. $45x^2 + 116x + 63 = 0$
   $(5x + 9)\ (9x + 7) = 0$
   $x = -1\ 4/5,\ -\ 7/9$

5. $72x^2 + 52x + 8 = 0$
   $(8x + 4)\ (9x + 2) = 0$
   $x = -\ 1/2,\ -\ 2/9$

6. $36x^2 + 60x + 16 = 0$
   $(6x + 8)\ (6x + 2) = 0$
   $x = -1\ 1/3,\ -\ 1/3$

7. $2x^2 + 16x + 30 = 0$
   $(2x + 6)\ (x + 5) = 0$
   $x = -3\ ,\ -5$

8. $81x^2 + 135x + 54 = 0$
   $(9x + 9)\ (9x + 6) = 0$
   $x = -1\ ,\ -\ 2/3$

9. $4x^2 + 8x + 3 = 0$
   $(2x + 3)\ (2x + 1) = 0$
   $x = -1\ 1/2,\ -\ 1/2$

10. $14x^2 + 65x + 9 = 0$
    $(2x + 9)\ (7x + 1) = 0$
    $x = -4\ 1/2,\ -\ 1/7$

11. $5x^2 + 23x + 12 = 0$
    $(x + 4)\ (5x + 3) = 0$
    $x = -4\ ,\ -\ 3/5$

12. $4x^2 + 17x + 15 = 0$
    $(x + 3)\ (4x + 5) = 0$
    $x = -3\ ,\ -1\ 1/4$

Resolver Cuadráticas (E)

Resuelva cada ecuación en función de x.

1. $6x^2 + 35x + 25 = 0$
2. $45x^2 + 14x + 1 = 0$
3. $45x^2 + 53x + 14 = 0$
4. $15x^2 + 35x + 20 = 0$
5. $56x^2 + 30x + 4 = 0$
6. $18x^2 + 61x + 40 = 0$
7. $81x^2 + 63x + 10 = 0$
8. $10x^2 + 22x + 4 = 0$
9. $4x^2 + 6x + 2 = 0$
10. $42x^2 + 38x + 8 = 0$
11. $4x^2 + 40x + 64 = 0$
12. $8x^2 + 51x + 18 = 0$

Resolver Cuadráticas (E) Respuestas

Resuelva cada ecuación en función de x.

1. $6x^2 + 35x + 25 = 0$
   $(x + 5)\ (6x + 5) = 0$
   $x = -5\ ,\ -5/6$

2. $45x^2 + 14x + 1 = 0$
   $(9x + 1)\ (5x + 1) = 0$
   $x = -1/9,\ -1/5$

3. $45x^2 + 53x + 14 = 0$
   $(9x + 7)\ (5x + 2) = 0$
   $x = -7/9,\ -2/5$

4. $15x^2 + 35x + 20 = 0$
   $(3x + 4)\ (5x + 5) = 0$
   $x = -1\ 1/3,\ -1$

5. $56x^2 + 30x + 4 = 0$
   $(8x + 2)\ (7x + 2) = 0$
   $x = -1/4,\ -2/7$

6. $18x^2 + 61x + 40 = 0$
   $(9x + 8)\ (2x + 5) = 0$
   $x = -8/9,\ -2\ 1/2$

7. $81x^2 + 63x + 10 = 0$
   $(9x + 5)\ (9x + 2) = 0$
   $x = -5/9,\ -2/9$

8. $10x^2 + 22x + 4 = 0$
   $(2x + 4)\ (5x + 1) = 0$
   $x = -2\ ,\ -1/5$

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

10. $42x^2 + 38x + 8 = 0$
    $(7x + 4)\ (6x + 2) = 0$
    $x = -4/7,\ -1/3$

11. $4x^2 + 40x + 64 = 0$
    $(4x + 8)\ (x + 8) = 0$
    $x = -2\ ,\ -8$

12. $8x^2 + 51x + 18 = 0$
    $(x + 6)\ (8x + 3) = 0$
    $x = -6\ ,\ -3/8$

Resolver Cuadráticas (F)

Resuelva cada ecuación en función de x.

1. $8x^2 + 41x + 36 = 0$

2. $12x^2 + 16x + 4 = 0$

3. $16x^2 + 40x + 24 = 0$

4. $25x^2 + 55x + 24 = 0$

5. $7x^2 + 43x + 40 = 0$

6. $21x^2 + 66x + 9 = 0$

7. $8x^2 + 39x + 28 = 0$

8. $49x^2 + 112x + 64 = 0$

9. $5x^2 + 49x + 72 = 0$

10. $40x^2 + 58x + 12 = 0$

11. $15x^2 + 14x + 3 = 0$

12. $24x^2 + 26x + 6 = 0$

Resolver Cuadráticas (F) Respuestas

Resuelva cada ecuación en función de x.

1. $8x^2 + 41x + 36 = 0$
   $(x + 4)\ (8x + 9) = 0$
   $x = -4\ ,\ \ -1\ 1/8$

2. $12x^2 + 16x + 4 = 0$
   $(3x + 1)\ (4x + 4) = 0$
   $x = -\ 1/3,\ \ -1$

3. $16x^2 + 40x + 24 = 0$
   $(2x + 3)\ (8x + 8) = 0$
   $x = -1\ 1/2,\ \ -1$

4. $25x^2 + 55x + 24 = 0$
   $(5x + 8)\ (5x + 3) = 0$
   $x = -1\ 3/5,\ \ -\ 3/5$

5. $7x^2 + 43x + 40 = 0$
   $(x + 5)\ (7x + 8) = 0$
   $x = -5\ ,\ \ -1\ 1/7$

6. $21x^2 + 66x + 9 = 0$
   $(3x + 9)\ (7x + 1) = 0$
   $x = -3\ ,\ \ -\ 1/7$

7. $8x^2 + 39x + 28 = 0$
   $(8x + 7)\ (x + 4) = 0$
   $x = -\ 7/8,\ \ -4$

8. $49x^2 + 112x + 64 = 0$
   $(7x + 8)\ (7x + 8) = 0$
   $x = -1\ 1/7$

9. $5x^2 + 49x + 72 = 0$
   $(5x + 9)\ (x + 8) = 0$
   $x = -1\ 4/5,\ \ -8$

10. $40x^2 + 58x + 12 = 0$
    $(5x + 6)\ (8x + 2) = 0$
    $x = -1\ 1/5,\ \ -\ 1/4$

11. $15x^2 + 14x + 3 = 0$
    $(5x + 3)\ (3x + 1) = 0$
    $x = -\ 3/5,\ \ -\ 1/3$

12. $24x^2 + 26x + 6 = 0$
    $(8x + 6)\ (3x + 1) = 0$
    $x = -\ 3/4,\ \ -\ 1/3$

Resolver Cuadráticas (G)

Resuelva cada ecuación en función de x.

1. $16x^2 + 40x + 24 = 0$
2. $10x^2 + 38x + 36 = 0$
3. $40x^2 + 36x + 8 = 0$
4. $6x^2 + 13x + 6 = 0$
5. $81x^2 + 90x + 16 = 0$
6. $36x^2 + 35x + 6 = 0$
7. $63x^2 + 86x + 16 = 0$
8. $56x^2 + 29x + 3 = 0$
9. $10x^2 + 39x + 14 = 0$
10. $12x^2 + 38x + 30 = 0$
11. $3x^2 + 11x + 6 = 0$
12. $6x^2 + 39x + 18 = 0$

Resolver Cuadráticas (G) Respuestas

Resuelva cada ecuación en función de x.

1. $16x^2 + 40x + 24 = 0$
   $(8x + 8)\ (2x + 3) = 0$
   $x = -1\ ,\ -1\ 1/2$

2. $10x^2 + 38x + 36 = 0$
   $(2x + 4)\ (5x + 9) = 0$
   $x = -2\ ,\ -1\ 4/5$

3. $40x^2 + 36x + 8 = 0$
   $(5x + 2)\ (8x + 4) = 0$
   $x = -\ 2/5,\ -\ 1/2$

4. $6x^2 + 13x + 6 = 0$
   $(2x + 3)\ (3x + 2) = 0$
   $x = -1\ 1/2,\ -\ 2/3$

5. $81x^2 + 90x + 16 = 0$
   $(9x + 8)\ (9x + 2) = 0$
   $x = -\ 8/9,\ -\ 2/9$

6. $36x^2 + 35x + 6 = 0$
   $(4x + 3)\ (9x + 2) = 0$
   $x = -\ 3/4,\ -\ 2/9$

7. $63x^2 + 86x + 16 = 0$
   $(9x + 2)\ (7x + 8) = 0$
   $x = -\ 2/9,\ -1\ 1/7$

8. $56x^2 + 29x + 3 = 0$
   $(8x + 3)\ (7x + 1) = 0$
   $x = -\ 3/8,\ -\ 1/7$

9. $10x^2 + 39x + 14 = 0$
   $(2x + 7)\ (5x + 2) = 0$
   $x = -3\ 1/2,\ -\ 2/5$

10. $12x^2 + 38x + 30 = 0$
    $(4x + 6)\ (3x + 5) = 0$
    $x = -1\ 1/2,\ -1\ 2/3$

11. $3x^2 + 11x + 6 = 0$
    $(3x + 2)\ (x + 3) = 0$
    $x = -\ 2/3,\ -3$

12. $6x^2 + 39x + 18 = 0$
    $(6x + 3)\ (x + 6) = 0$
    $x = -\ 1/2,\ -6$

Resolver Cuadráticas (H)

Resuelva cada ecuación en función de x.

1. $36x^2 + 37x + 7 = 0$

2. $18x^2 + 20x + 2 = 0$

3. $5x^2 + 48x + 64 = 0$

4. $18x^2 + 75x + 42 = 0$

5. $32x^2 + 56x + 20 = 0$

6. $7x^2 + 67x + 36 = 0$

7. $2x^2 + 11x + 5 = 0$

8. $12x^2 + 27x + 15 = 0$

9. $6x^2 + 30x + 36 = 0$

10. $12x^2 + 38x + 20 = 0$

11. $48x^2 + 92x + 42 = 0$

12. $27x^2 + 81x + 42 = 0$

Resolver Cuadráticas (H) Respuestas

Resuelva cada ecuación en función de x.

1. $36x^2 + 37x + 7 = 0$
   $(4x + 1)\ (9x + 7) = 0$
   $x = -\ 1/4,\ \ -\ 7/9$

2. $18x^2 + 20x + 2 = 0$
   $(9x + 1)\ (2x + 2) = 0$
   $x = -\ 1/9,\ \ -1$

3. $5x^2 + 48x + 64 = 0$
   $(x + 8)\ (5x + 8) = 0$
   $x = -8\ ,\ \ -1\ 3/5$

4. $18x^2 + 75x + 42 = 0$
   $(2x + 7)\ (9x + 6) = 0$
   $x = -3\ 1/2,\ \ -\ 2/3$

5. $32x^2 + 56x + 20 = 0$
   $(8x + 4)\ (4x + 5) = 0$
   $x = -\ 1/2,\ \ -1\ 1/4$

6. $7x^2 + 67x + 36 = 0$
   $(x + 9)\ (7x + 4) = 0$
   $x = -9\ ,\ \ -\ 4/7$

7. $2x^2 + 11x + 5 = 0$
   $(x + 5)\ (2x + 1) = 0$
   $x = -5\ ,\ \ -\ 1/2$

8. $12x^2 + 27x + 15 = 0$
   $(4x + 5)\ (3x + 3) = 0$
   $x = -1\ 1/4,\ \ -1$

9. $6x^2 + 30x + 36 = 0$
   $(3x + 9)\ (2x + 4) = 0$
   $x = -3\ ,\ \ -2$

10. $12x^2 + 38x + 20 = 0$
    $(6x + 4)\ (2x + 5) = 0$
    $x = -\ 2/3,\ \ -2\ 1/2$

11. $48x^2 + 92x + 42 = 0$
    $(8x + 6)\ (6x + 7) = 0$
    $x = -\ 3/4,\ \ -1\ 1/6$

12. $27x^2 + 81x + 42 = 0$
    $(9x + 6)\ (3x + 7) = 0$
    $x = -\ 2/3,\ \ -2\ 1/3$

Resolver Cuadráticas (I)

Resuelva cada ecuación en función de x.

1. $12x^2 + 40x + 32 = 0$
2. $3x^2 + 19x + 20 = 0$
3. $54x^2 + 117x + 63 = 0$
4. $12x^2 + 36x + 27 = 0$
5. $48x^2 + 114x + 63 = 0$
6. $18x^2 + 18x + 4 = 0$
7. $18x^2 + 21x + 6 = 0$
8. $40x^2 + 82x + 18 = 0$
9. $36x^2 + 87x + 42 = 0$
10. $6x^2 + 60x + 54 = 0$
11. $32x^2 + 88x + 56 = 0$
12. $2x^2 + 16x + 30 = 0$

Resolver Cuadráticas (I) Respuestas

Resuelva cada ecuación en función de x.

1. $12x^2 + 40x + 32 = 0$
   $(6x + 8)\ (2x + 4) = 0$
   $x = -1\ 1/3,\ \ -2$

2. $3x^2 + 19x + 20 = 0$
   $(3x + 4)\ (x + 5) = 0$
   $x = -1\ 1/3,\ \ -5$

3. $54x^2 + 117x + 63 = 0$
   $(6x + 7)\ (9x + 9) = 0$
   $x = -1\ 1/6,\ \ -1$

4. $12x^2 + 36x + 27 = 0$
   $(6x + 9)\ (2x + 3) = 0$
   $x = -1\ 1/2$

5. $48x^2 + 114x + 63 = 0$
   $(6x + 9)\ (8x + 7) = 0$
   $x = -1\ 1/2,\ \ -\ 7/8$

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

7. $18x^2 + 21x + 6 = 0$
   $(9x + 6)\ (2x + 1) = 0$
   $x = -\ 2/3,\ \ -\ 1/2$

8. $40x^2 + 82x + 18 = 0$
   $(8x + 2)\ (5x + 9) = 0$
   $x = -\ 1/4,\ \ -1\ 4/5$

9. $36x^2 + 87x + 42 = 0$
   $(9x + 6)\ (4x + 7) = 0$
   $x = -\ 2/3,\ \ -1\ 3/4$

10. $6x^2 + 60x + 54 = 0$
    $(x + 9)\ (6x + 6) = 0$
    $x = -9\ ,\ \ -1$

11. $32x^2 + 88x + 56 = 0$
    $(4x + 7)\ (8x + 8) = 0$
    $x = -1\ 3/4,\ \ -1$

12. $2x^2 + 16x + 30 = 0$
    $(2x + 6)\ (x + 5) = 0$
    $x = -3\ ,\ \ -5$

Resolver Cuadráticas (J)

Resuelva cada ecuación en función de x.

1. $20x^2 + 54x + 36 = 0$

2. $21x^2 + 84x + 63 = 0$

3. $12x^2 + 41x + 35 = 0$

4. $27x^2 + 99x + 54 = 0$

5. $63x^2 + 100x + 32 = 0$

6. $x^2 + 9x + 20 = 0$

7. $15x^2 + 51x + 42 = 0$

8. $24x^2 + 72x + 54 = 0$

9. $14x^2 + 35x + 21 = 0$

10. $6x^2 + 9x + 3 = 0$

11. $8x^2 + 32x + 24 = 0$

12. $25x^2 + 30x + 5 = 0$

Resolver Cuadráticas (J) Respuestas

Resuelva cada ecuación en función de x.

1. $20x^2 + 54x + 36 = 0$
   $(4x + 6)\ (5x + 6) = 0$
   $x = -1\ 1/2,\ \ -1\ 1/5$

2. $21x^2 + 84x + 63 = 0$
   $(3x + 9)\ (7x + 7) = 0$
   $x = -3\ ,\ \ -1$

3. $12x^2 + 41x + 35 = 0$
   $(3x + 5)\ (4x + 7) = 0$
   $x = -1\ 2/3,\ \ -1\ 3/4$

4. $27x^2 + 99x + 54 = 0$
   $(9x + 6)\ (3x + 9) = 0$
   $x = -\ 2/3,\ \ -3$

5. $63x^2 + 100x + 32 = 0$
   $(7x + 8)\ (9x + 4) = 0$
   $x = -1\ 1/7,\ \ -\ 4/9$

6. $x^2 + 9x + 20 = 0$
   $(x + 5)\ (x + 4) = 0$
   $x = -5\ ,\ \ -4$

7. $15x^2 + 51x + 42 = 0$
   $(3x + 6)\ (5x + 7) = 0$
   $x = -2\ ,\ \ -1\ 2/5$

8. $24x^2 + 72x + 54 = 0$
   $(6x + 9)\ (4x + 6) = 0$
   $x = -1\ 1/2$

9. $14x^2 + 35x + 21 = 0$
   $(7x + 7)\ (2x + 3) = 0$
   $x = -1\ ,\ \ -1\ 1/2$

10. $6x^2 + 9x + 3 = 0$
    $(6x + 3)\ (x + 1) = 0$
    $x = -\ 1/2,\ \ -1$

11. $8x^2 + 32x + 24 = 0$
    $(8x + 8)\ (x + 3) = 0$
    $x = -1\ ,\ \ -3$

12. $25x^2 + 30x + 5 = 0$
    $(5x + 5)\ (5x + 1) = 0$
    $x = -1\ ,\ \ -\ 1/5$