

Solving Quadratic Equations (H)

Name: _____

Date: _____

Solve each equation for x.

1. $12x^2 - 80x + 128 = 0$

11. $-12x^2 + 24x + 15 = 0$

2. $-4x^2 + 22x - 10 = 0$

12. $-12x^2 - 36x + 81 = 0$

3. $-12x^2 + 24x + 135 = 0$

13. $8x^2 + 30x + 28 = 0$

4. $9x^2 + 30x - 144 = 0$

14. $9x^2 - 24x + 12 = 0$

5. $20x^2 + 155x - 40 = 0$

15. $8x^2 + 68x + 120 = 0$

6. $-3x^2 + 27 = 0$

16. $-15x^2 - 55x + 210 = 0$

7. $-10x^2 - 95x - 210 = 0$

17. $12x^2 + 75x - 168 = 0$

8. $4x^2 + 44x + 120 = 0$

18. $-5x^2 - 45x - 100 = 0$

9. $15x^2 - 70x + 80 = 0$

19. $-6x^2 - 45x + 81 = 0$

10. $8x^2 - 40x + 18 = 0$

20. $-15x^2 + 20x + 160 = 0$

Solving Quadratic Equations (H) Answers

Name: _____

Date: _____

Solve each equation for x.

- $12x^2 - 80x + 128 = 0$
 $4(x - 4)(3x - 8) = 0$
 $x = 4, 2\frac{2}{3}$
- $-4x^2 + 22x - 10 = 0$
 $-2(x - 5)(2x - 1) = 0$
 $x = 5, \frac{1}{2}$
- $-12x^2 + 24x + 135 = 0$
 $-3(2x + 5)(2x - 9) = 0$
 $x = -2\frac{1}{2}, 4\frac{1}{2}$
- $9x^2 + 30x - 144 = 0$
 $3(3x - 8)(x + 6) = 0$
 $x = 2\frac{2}{3}, -6$
- $20x^2 + 155x - 40 = 0$
 $5(x + 8)(4x - 1) = 0$
 $x = -8, \frac{1}{4}$
- $-3x^2 + 27 = 0$
 $-3(x - 3)(x + 3) = 0$
 $x = 3, -3$
- $-10x^2 - 95x - 210 = 0$
 $-5(x + 6)(2x + 7) = 0$
 $x = -6, -3\frac{1}{2}$
- $4x^2 + 44x + 120 = 0$
 $4(x + 6)(x + 5) = 0$
 $x = -6, -5$
- $15x^2 - 70x + 80 = 0$
 $5(x - 2)(3x - 8) = 0$
 $x = 2, 2\frac{2}{3}$
- $8x^2 - 40x + 18 = 0$
 $2(2x - 1)(2x - 9) = 0$
 $x = \frac{1}{2}, 4\frac{1}{2}$
- $-12x^2 + 24x + 15 = 0$
 $-3(2x - 5)(2x + 1) = 0$
 $x = 2\frac{1}{2}, -\frac{1}{2}$
- $-12x^2 - 36x + 81 = 0$
 $-3(2x + 9)(2x - 3) = 0$
 $x = -4\frac{1}{2}, 1\frac{1}{2}$
- $8x^2 + 30x + 28 = 0$
 $2(4x + 7)(x + 2) = 0$
 $x = -1\frac{3}{4}, -2$
- $9x^2 - 24x + 12 = 0$
 $3(x - 2)(3x - 2) = 0$
 $x = 2, \frac{2}{3}$
- $8x^2 + 68x + 120 = 0$
 $4(x + 6)(2x + 5) = 0$
 $x = -6, -2\frac{1}{2}$
- $-15x^2 - 55x + 210 = 0$
 $-5(x + 6)(3x - 7) = 0$
 $x = -6, 2\frac{1}{3}$
- $12x^2 + 75x - 168 = 0$
 $3(x + 8)(4x - 7) = 0$
 $x = -8, 1\frac{3}{4}$
- $-5x^2 - 45x - 100 = 0$
 $-5(x + 5)(x + 4) = 0$
 $x = -5, -4$
- $-6x^2 - 45x + 81 = 0$
 $-3(2x - 3)(x + 9) = 0$
 $x = 1\frac{1}{2}, -9$
- $-15x^2 + 20x + 160 = 0$
 $-5(x - 4)(3x + 8) = 0$
 $x = 4, -2\frac{2}{3}$