

Solving Quadratic Equations (H)

Name: _____

Date: _____

Solve each equation for x.

1. $-63x^2 - 89x - 30 = 0$

11. $27x^2 - 30x - 25 = 0$

2. $15x^2 - 23x + 6 = 0$

12. $14x^2 - 37x - 42 = 0$

3. $-16x^2 - 74x - 63 = 0$

13. $-27x^2 - 30x - 7 = 0$

4. $15x^2 - 7x - 4 = 0$

14. $20x^2 + 21x - 54 = 0$

5. $45x^2 - 106x + 45 = 0$

15. $45x^2 + 14x + 1 = 0$

6. $12x^2 - 13x - 35 = 0$

16. $14x^2 + 33x - 56 = 0$

7. $-30x^2 - 47x - 7 = 0$

17. $-24x^2 + 46x - 21 = 0$

8. $-15x^2 + 8x - 1 = 0$

18. $8x^2 - 14x + 3 = 0$

9. $-6x^2 - 5x + 14 = 0$

19. $-81x^2 + 16 = 0$

10. $16x^2 - 74x + 63 = 0$

20. $-32x^2 + 60x - 27 = 0$

Solving Quadratic Equations (H) Answers

Name: _____

Date: _____

Solve each equation for x.

- $-63x^2 - 89x - 30 = 0$
 $-(7x + 6)(9x + 5) = 0$
 $x = -\frac{6}{7}, -\frac{5}{9}$
- $15x^2 - 23x + 6 = 0$
 $(5x - 6)(3x - 1) = 0$
 $x = 1\frac{1}{5}, \frac{1}{3}$
- $-16x^2 - 74x - 63 = 0$
 $-(2x + 7)(8x + 9) = 0$
 $x = -3\frac{1}{2}, -1\frac{1}{8}$
- $15x^2 - 7x - 4 = 0$
 $(3x + 1)(5x - 4) = 0$
 $x = -\frac{1}{3}, \frac{4}{5}$
- $45x^2 - 106x + 45 = 0$
 $(9x - 5)(5x - 9) = 0$
 $x = \frac{5}{9}, 1\frac{4}{5}$
- $12x^2 - 13x - 35 = 0$
 $(3x - 7)(4x + 5) = 0$
 $x = 2\frac{1}{3}, -1\frac{1}{4}$
- $-30x^2 - 47x - 7 = 0$
 $-(5x + 7)(6x + 1) = 0$
 $x = -1\frac{2}{5}, -\frac{1}{6}$
- $-15x^2 + 8x - 1 = 0$
 $-(5x - 1)(3x - 1) = 0$
 $x = \frac{1}{5}, \frac{1}{3}$
- $-6x^2 - 5x + 14 = 0$
 $-(x + 2)(6x - 7) = 0$
 $x = -2, 1\frac{1}{6}$
- $16x^2 - 74x + 63 = 0$
 $(8x - 9)(2x - 7) = 0$
 $x = 1\frac{1}{8}, 3\frac{1}{2}$
- $27x^2 - 30x - 25 = 0$
 $(9x + 5)(3x - 5) = 0$
 $x = -\frac{5}{9}, 1\frac{2}{3}$
- $14x^2 - 37x - 42 = 0$
 $(7x + 6)(2x - 7) = 0$
 $x = -\frac{6}{7}, 3\frac{1}{2}$
- $-27x^2 - 30x - 7 = 0$
 $-(3x + 1)(9x + 7) = 0$
 $x = -\frac{1}{3}, -\frac{7}{9}$
- $20x^2 + 21x - 54 = 0$
 $(5x - 6)(4x + 9) = 0$
 $x = 1\frac{1}{5}, -2\frac{1}{4}$
- $45x^2 + 14x + 1 = 0$
 $(9x + 1)(5x + 1) = 0$
 $x = -\frac{1}{9}, -\frac{1}{5}$
- $14x^2 + 33x - 56 = 0$
 $(2x + 7)(7x - 8) = 0$
 $x = -3\frac{1}{2}, 1\frac{1}{7}$
- $-24x^2 + 46x - 21 = 0$
 $-(6x - 7)(4x - 3) = 0$
 $x = 1\frac{1}{6}, \frac{3}{4}$
- $8x^2 - 14x + 3 = 0$
 $(2x - 3)(4x - 1) = 0$
 $x = 1\frac{1}{2}, \frac{1}{4}$
- $-81x^2 + 16 = 0$
 $-(9x - 4)(9x + 4) = 0$
 $x = \frac{4}{9}, -\frac{4}{9}$
- $-32x^2 + 60x - 27 = 0$
 $-(4x - 3)(8x - 9) = 0$
 $x = \frac{3}{4}, 1\frac{1}{8}$