

Solving Quadratic Equations (I)

Name: _____

Date: _____

Solve each equation for x.

1. $-24x^2 + 20x + 84 = 0$

11. $189x^2 - 174x - 48 = 0$

2. $-50x^2 - 155x - 120 = 0$

12. $-280x^2 - 85x + 15 = 0$

3. $96x^2 - 172x + 20 = 0$

13. $63x^2 - 138x - 21 = 0$

4. $96x^2 + 92x + 20 = 0$

14. $8x^2 - 8x - 6 = 0$

5. $-100x^2 + 100x + 144 = 0$

15. $9x^2 + 21x + 12 = 0$

6. $-50x^2 - 155x - 75 = 0$

16. $-6x^2 - 45x + 81 = 0$

7. $216x^2 - 84x - 196 = 0$

17. $96x^2 - 12x - 63 = 0$

8. $-405x^2 - 45x + 100 = 0$

18. $270x^2 - 195x - 40 = 0$

9. $75x^2 - 105x - 54 = 0$

19. $64x^2 - 8x - 90 = 0$

10. $105x^2 - 80x - 80 = 0$

20. $-126x^2 - 44x + 42 = 0$

Solving Quadratic Equations (I) Answers

Name: _____

Date: _____

Solve each equation for x.

- $-24x^2 + 20x + 84 = 0$
 $-4(3x - 7)(2x + 3) = 0$
 $x = 2\frac{1}{3}, -1\frac{1}{2}$
- $-50x^2 - 155x - 120 = 0$
 $-5(2x + 3)(5x + 8) = 0$
 $x = -1\frac{1}{2}, -1\frac{3}{5}$
- $96x^2 - 172x + 20 = 0$
 $4(3x - 5)(8x - 1) = 0$
 $x = 1\frac{2}{3}, \frac{1}{8}$
- $96x^2 + 92x + 20 = 0$
 $4(3x + 1)(8x + 5) = 0$
 $x = -\frac{1}{3}, -\frac{5}{8}$
- $-100x^2 + 100x + 144 = 0$
 $-4(5x + 4)(5x - 9) = 0$
 $x = -\frac{4}{5}, 1\frac{4}{5}$
- $-50x^2 - 155x - 75 = 0$
 $-5(2x + 5)(5x + 3) = 0$
 $x = -2\frac{1}{2}, -\frac{3}{5}$
- $216x^2 - 84x - 196 = 0$
 $4(6x - 7)(9x + 7) = 0$
 $x = 1\frac{1}{6}, -\frac{7}{9}$
- $-405x^2 - 45x + 100 = 0$
 $-5(9x + 5)(9x - 4) = 0$
 $x = -\frac{5}{9}, \frac{4}{9}$
- $75x^2 - 105x - 54 = 0$
 $3(5x - 9)(5x + 2) = 0$
 $x = 1\frac{4}{5}, -\frac{2}{5}$
- $105x^2 - 80x - 80 = 0$
 $5(7x + 4)(3x - 4) = 0$
 $x = -\frac{4}{7}, 1\frac{1}{3}$
- $189x^2 - 174x - 48 = 0$
 $3(7x - 8)(9x + 2) = 0$
 $x = 1\frac{1}{7}, -\frac{2}{9}$
- $-280x^2 - 85x + 15 = 0$
 $-5(8x - 1)(7x + 3) = 0$
 $x = \frac{1}{8}, -\frac{3}{7}$
- $63x^2 - 138x - 21 = 0$
 $3(7x + 1)(3x - 7) = 0$
 $x = -\frac{1}{7}, 2\frac{1}{3}$
- $8x^2 - 8x - 6 = 0$
 $2(2x - 3)(2x + 1) = 0$
 $x = 1\frac{1}{2}, -\frac{1}{2}$
- $9x^2 + 21x + 12 = 0$
 $3(3x + 4)(x + 1) = 0$
 $x = -1\frac{1}{3}, -1$
- $-6x^2 - 45x + 81 = 0$
 $-3(x + 9)(2x - 3) = 0$
 $x = -9, 1\frac{1}{2}$
- $96x^2 - 12x - 63 = 0$
 $3(8x - 7)(4x + 3) = 0$
 $x = \frac{7}{8}, -\frac{3}{4}$
- $270x^2 - 195x - 40 = 0$
 $5(9x - 8)(6x + 1) = 0$
 $x = \frac{8}{9}, -\frac{1}{6}$
- $64x^2 - 8x - 90 = 0$
 $2(4x - 5)(8x + 9) = 0$
 $x = 1\frac{1}{4}, -1\frac{1}{8}$
- $-126x^2 - 44x + 42 = 0$
 $-2(7x - 3)(9x + 7) = 0$
 $x = \frac{3}{7}, -\frac{7}{9}$