

Solving Quadratic Equations (G)

Name: _____

Date: _____

Solve each equation for x.

1. $108x^2 - 192x - 140 = 0$

11. $-90x^2 - 51x + 63 = 0$

2. $84x^2 - 148x - 112 = 0$

12. $-18x^2 + 6x + 4 = 0$

3. $108x^2 - 186x + 70 = 0$

13. $288x^2 + 484x + 180 = 0$

4. $-90x^2 - 152x + 18 = 0$

14. $20x^2 + 22x - 70 = 0$

5. $64x^2 - 120x + 50 = 0$

15. $14x^2 + 62x + 24 = 0$

6. $-40x^2 + 52x + 36 = 0$

16. $324x^2 + 180x - 56 = 0$

7. $160x^2 + 180x - 175 = 0$

17. $-160x^2 - 76x + 56 = 0$

8. $-20x^2 - 136x - 180 = 0$

18. $120x^2 - 129x + 21 = 0$

9. $98x^2 + 70x - 72 = 0$

19. $-63x^2 + 39x + 60 = 0$

10. $96x^2 + 100x + 14 = 0$

20. $-16x^2 + 108x + 324 = 0$

Solving Quadratic Equations (G) Answers

Name: _____

Date: _____

Solve each equation for x.

- $108x^2 - 192x - 140 = 0$
 $4(3x - 7)(9x + 5) = 0$
 $x = 2\frac{1}{3}, -\frac{5}{9}$
- $84x^2 - 148x - 112 = 0$
 $4(3x - 7)(7x + 4) = 0$
 $x = 2\frac{1}{3}, -\frac{4}{7}$
- $108x^2 - 186x + 70 = 0$
 $2(9x - 5)(6x - 7) = 0$
 $x = \frac{5}{9}, 1\frac{1}{6}$
- $-90x^2 - 152x + 18 = 0$
 $-2(5x + 9)(9x - 1) = 0$
 $x = -1\frac{4}{5}, \frac{1}{9}$
- $64x^2 - 120x + 50 = 0$
 $2(8x - 5)(4x - 5) = 0$
 $x = \frac{5}{8}, 1\frac{1}{4}$
- $-40x^2 + 52x + 36 = 0$
 $-4(5x - 9)(2x + 1) = 0$
 $x = 1\frac{4}{5}, -\frac{1}{2}$
- $160x^2 + 180x - 175 = 0$
 $5(4x + 7)(8x - 5) = 0$
 $x = -1\frac{3}{4}, \frac{5}{8}$
- $-20x^2 - 136x - 180 = 0$
 $-4(x + 5)(5x + 9) = 0$
 $x = -5, -1\frac{4}{5}$
- $98x^2 + 70x - 72 = 0$
 $2(7x - 4)(7x + 9) = 0$
 $x = \frac{4}{7}, -1\frac{2}{7}$
- $96x^2 + 100x + 14 = 0$
 $2(8x + 7)(6x + 1) = 0$
 $x = -\frac{7}{8}, -\frac{1}{6}$
- $-90x^2 - 51x + 63 = 0$
 $-3(5x - 3)(6x + 7) = 0$
 $x = \frac{3}{5}, -1\frac{1}{6}$
- $-18x^2 + 6x + 4 = 0$
 $-2(3x - 2)(3x + 1) = 0$
 $x = \frac{2}{3}, -\frac{1}{3}$
- $288x^2 + 484x + 180 = 0$
 $4(9x + 5)(8x + 9) = 0$
 $x = -\frac{5}{9}, -1\frac{1}{8}$
- $20x^2 + 22x - 70 = 0$
 $2(2x + 5)(5x - 7) = 0$
 $x = -2\frac{1}{2}, 1\frac{2}{5}$
- $14x^2 + 62x + 24 = 0$
 $2(x + 4)(7x + 3) = 0$
 $x = -4, -\frac{3}{7}$
- $324x^2 + 180x - 56 = 0$
 $4(9x + 7)(9x - 2) = 0$
 $x = -\frac{7}{9}, \frac{2}{9}$
- $-160x^2 - 76x + 56 = 0$
 $-4(8x + 7)(5x - 2) = 0$
 $x = -\frac{7}{8}, \frac{2}{5}$
- $120x^2 - 129x + 21 = 0$
 $3(8x - 7)(5x - 1) = 0$
 $x = \frac{7}{8}, \frac{1}{5}$
- $-63x^2 + 39x + 60 = 0$
 $-3(7x + 5)(3x - 4) = 0$
 $x = -\frac{5}{7}, 1\frac{1}{3}$
- $-16x^2 + 108x + 324 = 0$
 $-4(4x + 9)(x - 9) = 0$
 $x = -2\frac{1}{4}, 9$