

Solving Quadratic Equations (A)

Name: _____

Date: _____

Solve each equation for x.

1. $-20x^2 - 56x - 32 = 0$

11. $-8x^2 - 50x - 72 = 0$

2. $54x^2 - 153x - 126 = 0$

12. $21x^2 - 140x - 441 = 0$

3. $-56x^2 + 497x - 392 = 0$

13. $30x^2 + 145x - 210 = 0$

4. $-16x^2 - 168x - 392 = 0$

14. $7x^2 - 105x + 392 = 0$

5. $-40x^2 - 85x - 45 = 0$

15. $-30x^2 - 115x + 90 = 0$

6. $-15x^2 - 10x + 5 = 0$

16. $-45x^2 + 162x - 81 = 0$

7. $81x^2 - 288x + 135 = 0$

17. $-64x^2 + 80x + 504 = 0$

8. $-36x^2 + 102x + 168 = 0$

18. $-16x^2 - 32x + 20 = 0$

9. $24x^2 + 56x + 32 = 0$

19. $-27x^2 + 75x + 18 = 0$

10. $-42x^2 - 245x - 343 = 0$

20. $-30x^2 - 85x - 60 = 0$

Solving Quadratic Equations (A) Answers

Name: _____

Date: _____

Solve each equation for x.

- $-20x^2 - 56x - 32 = 0$
 $-4(x + 2)(5x + 4) = 0$
 $x = -2, -\frac{4}{5}$
- $54x^2 - 153x - 126 = 0$
 $9(3x + 2)(2x - 7) = 0$
 $x = -\frac{2}{3}, 3\frac{1}{2}$
- $-56x^2 + 497x - 392 = 0$
 $-7(8x - 7)(x - 8) = 0$
 $x = \frac{7}{8}, 8$
- $-16x^2 - 168x - 392 = 0$
 $-8(2x + 7)(x + 7) = 0$
 $x = -3\frac{1}{2}, -7$
- $-40x^2 - 85x - 45 = 0$
 $-5(x + 1)(8x + 9) = 0$
 $x = -1, -1\frac{1}{8}$
- $-15x^2 - 10x + 5 = 0$
 $-5(x + 1)(3x - 1) = 0$
 $x = -1, \frac{1}{3}$
- $81x^2 - 288x + 135 = 0$
 $9(x - 3)(9x - 5) = 0$
 $x = 3, \frac{5}{9}$
- $-36x^2 + 102x + 168 = 0$
 $-6(x - 4)(6x + 7) = 0$
 $x = 4, -1\frac{1}{6}$
- $24x^2 + 56x + 32 = 0$
 $8(3x + 4)(x + 1) = 0$
 $x = -1\frac{1}{3}, -1$
- $-42x^2 - 245x - 343 = 0$
 $-7(3x + 7)(2x + 7) = 0$
 $x = -2\frac{1}{3}, -3\frac{1}{2}$
- $-8x^2 - 50x - 72 = 0$
 $-2(4x + 9)(x + 4) = 0$
 $x = -2\frac{1}{4}, -4$
- $21x^2 - 140x - 441 = 0$
 $7(3x + 7)(x - 9) = 0$
 $x = -2\frac{1}{3}, 9$
- $30x^2 + 145x - 210 = 0$
 $5(6x - 7)(x + 6) = 0$
 $x = 1\frac{1}{6}, -6$
- $7x^2 - 105x + 392 = 0$
 $7(x - 8)(x - 7) = 0$
 $x = 8, 7$
- $-30x^2 - 115x + 90 = 0$
 $-5(3x - 2)(2x + 9) = 0$
 $x = \frac{2}{3}, -4\frac{1}{2}$
- $-45x^2 + 162x - 81 = 0$
 $-9(5x - 3)(x - 3) = 0$
 $x = \frac{3}{5}, 3$
- $-64x^2 + 80x + 504 = 0$
 $-8(2x - 7)(4x + 9) = 0$
 $x = 3\frac{1}{2}, -2\frac{1}{4}$
- $-16x^2 - 32x + 20 = 0$
 $-4(2x + 5)(2x - 1) = 0$
 $x = -2\frac{1}{2}, \frac{1}{2}$
- $-27x^2 + 75x + 18 = 0$
 $-3(x - 3)(9x + 2) = 0$
 $x = 3, -\frac{2}{9}$
- $-30x^2 - 85x - 60 = 0$
 $-5(2x + 3)(3x + 4) = 0$
 $x = -1\frac{1}{2}, -1\frac{1}{3}$