



Solve each problem. Write your answer as a decimal rounded to 2 places.

**Answers**

1)  $x(-4x + 5) = -6$

2)  $x(-15x - 30) = 15$

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

3)  $x(-8x - 2) = -1$

4)  $x(-15x + 13) = 2$

5)  $x(-10x + 4) = -6$

6)  $x(-6x - 5) = -25$

7)  $x(-16x - 16) = 4$

8)  $x(15x + 2) = 1$

9)  $x(9x - 12) = -4$

10)  $x(-1x + 1) = -12$



Solve each problem. Write your answer as a decimal rounded to 2 places.

1)  $x(-4x + 5) = -6$

$$\frac{-5 \pm \sqrt{52 - 4(-4)(6)}}{-8}$$

$$\frac{-5 \pm 11}{-8}$$

$$x_+ = -\frac{3}{4}$$

$$x_- = -1$$

2)  $x(-15x - 30) = 15$

$$\frac{30 \pm \sqrt{-302 - 4(-15)(-15)}}{-30}$$

$$\frac{30 \pm 0}{-30}$$

$$x_+ = -1$$

$$x_- = -1$$

3)  $x(-8x - 2) = -1$

$$\frac{2 \pm \sqrt{-22 - 4(-8)(1)}}{-16}$$

$$\frac{2 \pm 6}{-16}$$

$$x_+ = -\frac{1}{2}$$

$$x_- = -\frac{1}{4}$$

4)  $x(-15x + 13) = 2$

$$\frac{-13 \pm \sqrt{132 - 4(-15)(-2)}}{-30}$$

$$\frac{-13 \pm 7}{-30}$$

$$x_+ = -\frac{1}{5}$$

$$x_- = -\frac{2}{3}$$

5)  $x(-10x + 4) = -6$

$$\frac{-4 \pm \sqrt{42 - 4(-10)(6)}}{-20}$$

$$\frac{-4 \pm 16}{-20}$$

$$x_+ = -\frac{3}{5}$$

$$x_- = -\frac{1}{5}$$

6)  $x(-6x - 5) = -25$

$$\frac{5 \pm \sqrt{-52 - 4(-6)(25)}}{-12}$$

$$\frac{5 \pm 25}{-12}$$

$$x_+ = -\frac{5}{2}$$

$$x_- = -\frac{5}{3}$$

7)  $x(-16x - 16) = 4$

$$\frac{16 \pm \sqrt{-162 - 4(-16)(-4)}}{-32}$$

$$\frac{16 \pm 0}{-32}$$

$$x_+ = -\frac{1}{2}$$

$$x_- = -\frac{1}{2}$$

8)  $x(15x + 2) = 1$

$$\frac{-2 \pm \sqrt{22 - 4(15)(-1)}}{-30}$$

$$\frac{-2 \pm 8}{-30}$$

$$x_+ = \frac{1}{5}$$

$$x_- = \frac{1}{3}$$

9)  $x(9x - 12) = -4$

$$\frac{12 \pm \sqrt{-122 - 4(9)(4)}}{18}$$

$$\frac{12 \pm 0}{18}$$

$$x_+ = \frac{2}{3}$$

$$x_- = \frac{2}{3}$$

10)  $x(-1x + 1) = -12$

$$\frac{-1 \pm \sqrt{12 - 4(-1)(12)}}{-2}$$

$$\frac{-1 \pm 7}{-2}$$

$$x_+ = -1$$

$$x_- = -1$$

**Answers**

1. **-0.75 , 2.00**

2. **-1.00 , -1.00**

3. **-0.50 , 0.25**

4. **0.20 , 0.67**

5. **-0.60 , 1.00**

6. **-2.50 , 1.67**

7. **-0.50 , -0.50**

8. **0.20 , -0.33**

9. **0.67 , 0.67**

10. **-3.00 , 4.00**