



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

Answers

1) $x(10x - 14) = 12$

2) $x(-15x - 27) = 12$

1. _____

2. _____

3. _____

4. _____

3) $x(-8x + 10) = -3$

4) $x(10x + 0) = 10$

5. _____

6. _____

7. _____

8. _____

5) $x(-15x - 22) = -5$

6) $x(4x + 4) = 15$

9. _____

10. _____

7) $x(-4x - 13) = 3$

8) $x(8x + 12) = 20$

9) $x(-9x - 3) = -12$

10) $x(-25x + 25) = 4$



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

1) $x(10x - 14) = 12$

$$14 \pm \sqrt{-142 - 4(10)(-12)}$$

$$\frac{14 \pm 26}{20}$$

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

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

2) $x(-15x - 27) = 12$

$$27 \pm \sqrt{-272 - 4(-15)(-12)}$$

$$\frac{27 \pm 3}{-30}$$

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

$$x_- = \frac{4}{-5}$$

3) $x(-8x + 10) = -3$

$$-10 \pm \sqrt{102 - 4(-8)(3)}$$

$$\frac{-10 \pm 14}{-16}$$

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

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

4) $x(10x + 0) = 10$

$$-0 \pm \sqrt{2 - 4(10)(-10)}$$

$$\frac{0 \pm 20}{20}$$

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

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

5) $x(-15x - 22) = -5$

$$22 \pm \sqrt{-222 - 4(-15)(5)}$$

$$\frac{22 \pm 28}{-30}$$

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

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

6) $x(4x + 4) = 15$

$$-4 \pm \sqrt{42 - 4(4)(-15)}$$

$$\frac{-4 \pm 16}{8}$$

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

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

7) $x(-4x - 13) = 3$

$$13 \pm \sqrt{-132 - 4(-4)(-3)}$$

$$\frac{13 \pm 11}{-8}$$

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

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

8) $x(8x + 12) = 20$

$$-12 \pm \sqrt{122 - 4(8)(-20)}$$

$$\frac{-12 \pm 28}{16}$$

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

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

9) $x(-9x - 3) = -12$

$$3 \pm \sqrt{-32 - 4(-9)(12)}$$

$$\frac{3 \pm 21}{-18}$$

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

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

10) $x(-25x + 25) = 4$

$$-25 \pm \sqrt{252 - 4(-25)(-4)}$$

$$\frac{-25 \pm 15}{-50}$$

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

$$x_- = \frac{-4}{-5}$$

Answers

1. **2.00 , -0.60**

2. **-1.00 , -0.80**

3. **-0.25 , 1.50**

4. **1.00 , -1.00**

5. **-1.67 , 0.20**

6. **1.50 , -2.50**

7. **-3.00 , -0.25**

8. **1.00 , -2.50**

9. **-1.33 , 1.00**

10. **0.20 , 0.80**