



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

Answers

1) $x(-8x + 0) = -2$

2) $x(12x + 17) = -6$

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

3) $x(25x + 10) = 8$

4) $x(3x - 9) = -6$

5) $x(3x - 7) = 6$

6) $x(8x - 16) = 10$

7) $x(12x + 17) = 5$

8) $x(10x + 11) = 6$

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

10) $x(-1x - 9) = 20$



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

1) $x(-8x + 0) = -2$

$$\frac{-0 \pm \sqrt{2 - 4(-8)(2)}}{2}$$

$$\frac{0 \pm 8}{-16}$$

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

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

2) $x(12x + 17) = -6$

$$\frac{-17 \pm \sqrt{172 - 4(12)(6)}}{24}$$

$$\frac{-17 \pm 1}{24}$$

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

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

3) $x(25x + 10) = 8$

$$\frac{-10 \pm \sqrt{102 - 4(25)(-8)}}{50}$$

$$\frac{-10 \pm 30}{50}$$

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

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

4) $x(3x - 9) = -6$

$$\frac{9 \pm \sqrt{-92 - 4(3)(6)}}{6}$$

$$\frac{9 \pm 3}{6}$$

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

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

5) $x(3x - 7) = 6$

$$\frac{7 \pm \sqrt{-72 - 4(3)(-6)}}{6}$$

$$\frac{7 \pm 11}{6}$$

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

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

6) $x(8x - 16) = 10$

$$\frac{16 \pm \sqrt{-162 - 4(8)(-10)}}{16}$$

$$\frac{16 \pm 24}{16}$$

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

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

7) $x(12x + 17) = 5$

$$\frac{-17 \pm \sqrt{172 - 4(12)(-5)}}{24}$$

$$\frac{-17 \pm 23}{24}$$

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

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

8) $x(10x + 11) = 6$

$$\frac{-11 \pm \sqrt{112 - 4(10)(-6)}}{20}$$

$$\frac{-11 \pm 19}{20}$$

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

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

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

$$\frac{3 \pm \sqrt{-32 - 4(-2)(-1)}}{2}$$

$$\frac{3 \pm 1}{-4}$$

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

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

10) $x(-1x - 9) = 20$

$$\frac{9 \pm \sqrt{-92 - 4(-1)(-20)}}{2}$$

$$\frac{9 \pm 1}{-2}$$

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

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

Answers

1. **-0.50 , 0.50**

2. **-0.67 , -0.75**

3. **0.40 , -0.80**

4. **2.00 , 1.00**

5. **3.00 , -0.67**

6. **2.50 , -0.50**

7. **0.25 , -1.67**

8. **0.40 , -1.50**

9. **-1.00 , -0.50**

10. **-5.00 , -4.00**