



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

Answers

1) $x(-8x + 6) = -9$

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

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

3) $x(5x - 23) = -12$

4) $x(12x + 13) = -3$

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

6) $x(2x + 9) = -9$

7) $x(20x + 17) = -3$

8) $x(15x + 17) = 4$

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

10) $x(16x - 20) = -6$



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

1) $x(-8x + 6) = -9$

$$\frac{-6 \pm \sqrt{62 - 4(-8)(9)}}{-16}$$

$$\frac{-6 \pm 18}{-16}$$

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

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

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

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

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

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

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

3) $x(5x - 23) = -12$

$$\frac{23 \pm \sqrt{-232 - 4(5)(12)}}{10}$$

$$\frac{23 \pm 17}{10}$$

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

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

4) $x(12x + 13) = -3$

$$\frac{-13 \pm \sqrt{132 - 4(12)(3)}}{24}$$

$$\frac{-13 \pm 5}{24}$$

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

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

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

$$\frac{-1 \pm \sqrt{12 - 4(-12)(1)}}{-24}$$

$$\frac{-1 \pm 7}{-24}$$

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

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

6) $x(2x + 9) = -9$

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

$$\frac{-9 \pm 3}{4}$$

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

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

7) $x(20x + 17) = -3$

$$\frac{-17 \pm \sqrt{172 - 4(20)(3)}}{40}$$

$$\frac{-17 \pm 7}{40}$$

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

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

8) $x(15x + 17) = 4$

$$\frac{-17 \pm \sqrt{172 - 4(15)(-4)}}{30}$$

$$\frac{-17 \pm 23}{30}$$

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

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

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

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

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

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

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

10) $x(16x - 20) = -6$

$$\frac{20 \pm \sqrt{-202 - 4(16)(6)}}{32}$$

$$\frac{20 \pm 4}{32}$$

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

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

Answers

1. **-0.75 , 1.50**

2. **0.50 , -1.00**

3. **4.00 , 0.60**

4. **-0.33 , -0.75**

5. **-0.25 , 0.33**

6. **-1.50 , -3.00**

7. **-0.25 , -0.60**

8. **0.20 , -1.33**

9. **2.00 , -4.00**

10. **0.75 , 0.50**