



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

Answers

1) $x(1x + 3) = 4$

2) $x(-3x + 10) = -25$

1. _____

2. _____

3. _____

4. _____

3) $x(5x - 30) = -25$

4) $x(-5x - 29) = 20$

5. _____

6. _____

7. _____

8. _____

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

6) $x(8x - 4) = 12$

9. _____

10. _____

7) $x(12x + 2) = 4$

8) $x(-4x - 8) = 4$

9) $x(16x - 36) = -20$

10) $x(4x + 8) = 5$



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

1) $x(1x + 3) = 4$

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

$$\frac{-3 \pm 5}{2}$$

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

$$x_- = -\frac{4}{2}$$

2) $x(-3x + 10) = -25$

$$\frac{-10 \pm \sqrt{102 - 4(-3)(-25)}}{-6}$$

$$\frac{-10 \pm 20}{-6}$$

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

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

3) $x(5x - 30) = -25$

$$\frac{30 \pm \sqrt{-302 - 4(5)(-25)}}{10}$$

$$\frac{30 \pm 20}{10}$$

$$x_+ = \frac{5}{10}$$

$$x_- = \frac{1}{10}$$

4) $x(-5x - 29) = 20$

$$\frac{29 \pm \sqrt{-292 - 4(-5)(-20)}}{-10}$$

$$\frac{29 \pm 21}{-10}$$

$$x_+ = \frac{5}{-10}$$

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

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

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

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

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

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

6) $x(8x - 4) = 12$

$$\frac{4 \pm \sqrt{-42 - 4(8)(-12)}}{16}$$

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

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

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

7) $x(12x + 2) = 4$

$$\frac{-2 \pm \sqrt{22 - 4(12)(-4)}}{24}$$

$$\frac{-2 \pm 14}{24}$$

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

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

8) $x(-4x - 8) = 4$

$$\frac{8 \pm \sqrt{-82 - 4(-4)(-4)}}{-8}$$

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

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

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

9) $x(16x - 36) = -20$

$$\frac{36 \pm \sqrt{-362 - 4(16)(-20)}}{32}$$

$$\frac{36 \pm 4}{32}$$

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

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

10) $x(4x + 8) = 5$

$$\frac{-8 \pm \sqrt{82 - 4(4)(-5)}}{8}$$

$$\frac{-8 \pm 12}{8}$$

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

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

Answers

1. **1.00 , -4.00**
2. **-1.67 , 5.00**
3. **5.00 , 1.00**
4. **-5.00 , -0.80**
5. **0.20 , -1.33**
6. **1.50 , -1.00**
7. **0.50 , -0.67**
8. **-1.00 , -1.00**
9. **1.25 , 1.00**
10. **0.50 , -2.50**