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

1) x(6x + 4) = 16

2) x(3x - 10) = 25

3) x(-5x + 9) = -2

4) x(-3x + 8) = -3

5) x(-10x + 0) = -10

6) x(-16x + 16) = 4

7) x(-6x + 16) = 8

8) x(-20x - 13) = 2

9) x(20x + 10) = 10

10) x(25x - 20) = -3

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

1-10	90	80	70	60	50	40	30	20	10	0

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

1) x(6x + 4) = 16

$-4+-\sqrt{42 - 4(6)(-16)}$

$\frac{-4 \pm 20}{12}$

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

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

2) x(3x - 10) = 25

$10+-\sqrt{-102 - 4(3)(-25)}$

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

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

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

3) x(-5x + 9) = -2

$-9+-\sqrt{92 - 4(-5)(2)}$

$\frac{-9 \pm 11}{-10}$

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

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

4) x(-3x + 8) = -3

$-8+-\sqrt{82 - 4(-3)(3)}$

$\frac{-8 \pm 10}{-6}$

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

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

5) x(-10x + 0) = -10

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

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

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

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

6) x(-16x + 16) = 4

$-16+-\sqrt{162 - 4(-16)(-4)}$

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

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

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

7) x(-6x + 16) = 8

$-16+-\sqrt{162 - 4(-6)(-8)}$

$\frac{-16 \pm 8}{-12}$

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

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

8) x(-20x - 13) = 2

$13+-\sqrt{-132 - 4(-20)(-2)}$

$\frac{13 \pm 3}{-40}$

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

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

9) x(20x + 10) = 10

$-10+-\sqrt{102 - 4(20)(-10)}$

$\frac{-10 \pm 30}{40}$

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

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

10) x(25x - 20) = -3

$20+-\sqrt{-202 - 4(25)(3)}$

$\frac{20 \pm 10}{50}$

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

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

Answers

1. **1.33 , -2.00**
2. **5.00 , -1.67**
3. **-0.20 , 2.00**
4. **-0.33 , 3.00**
5. **-1.00 , 1.00**
6. **0.50 , 0.50**
7. **0.67 , 2.00**
8. **-0.40 , -0.25**
9. **0.50 , -1.00**
10. **0.60 , 0.20**

1-10	90	80	70	60	50	40	30	20	10	0