



Find the value of x.

1)  $39 - 2x = -6x + 75$

2)  $2x - 6 = -5x + 50$

3)  $32 + -5x = -10x + 47$

4)  $2 + 5x = 82 + -3x$

5)  $105 + -4x = -11x + 147$

6)  $-2x + 55 = 75 + -12x$

7)  $8 + 3x = 38 + -7x$

8)  $16 + 1x = -5x + 52$

9)  $12 + 5x = -2x + 61$

10)  $-4x + 74 = 128 + -13x$

11)  $-1x + 85 = -4x + 103$

12)  $27 + -1x = 42 + -4x$

Answers

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

11. \_\_\_\_\_

12. \_\_\_\_\_



**Find the value of x.**

$$\begin{aligned} 1) \quad 39 - 2x &= -6x + 75 \\ 4x &= 36 \\ x &\equiv 9 \end{aligned}$$

$$\begin{aligned} 2) \quad & 2x - 6 = -5x + 50 \\ & 7x = 56 \\ & x = 8 \end{aligned}$$

$$3) \quad 32 + -5x = -10x + 47$$
$$5x = 15$$
$$x = 3$$

$$4) \quad 2 + 5x = 82 + -3x$$
$$8x = 80$$
$$x = 10$$

$$5) \quad 105 + -4x = -11x + 147$$
$$7x = 42$$
$$x = 6$$

$$\begin{aligned} 6) \quad -2x + 55 &= 75 + -12x \\ 10x &= 20 \\ x &= 2 \end{aligned}$$

$$7) \quad 8 + 3x = 38 + -7x$$
$$10x = 30$$
$$x = 3$$

$$8) \quad 16 + 1x = -5x + 52$$
$$6x = 36$$
$$x = 6$$

$$9) \quad 12 + 5x = -2x + 61$$
$$7x = 49$$
$$x = 7$$

$$10) \quad -4x + 74 = 128 + -13x$$
$$\textcolor{red}{9x = 54}$$
$$\textcolor{red}{x = 6}$$

$$11) \quad -1x + 85 = -4x + 103$$
$$3x = 18$$
$$x = 6$$

$$12) \quad 27 + -1x = 42 + -4x$$
$$\begin{aligned} 3x &= 15 \\ x &= 5 \end{aligned}$$

## Answers

1 9

2. 8

2. 8

3

4. 10

5. 6

6. 2

7. 3

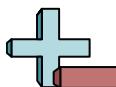
8. 6

9. 7

10. 6

11. 6

12.       5



## Determining Variable Value to Balance Equations

Name: \_\_\_\_\_

Find the value of x.

8  
36  
27  
66  
39  
10Answers

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

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