



Find the value of x.

1) $2x + 38 = 102 + -6x$

2) $100 + -3x = 136 + -7x$

3) $-2x + 32 = -7x + 62$

4) $57 - 1x = 77 - 6x$

5) $4x + 56 = -5x + 74$

6) $-3x + 40 = 56 - 5x$

7) $-4x + 56 = -6x + 62$

8) $86 - 2x = -9x + 107$

9) $2x - 7 = 29 - 2x$

10) $36 + 1x = -9x + 56$

11) $45 + -4x = -13x + 108$

12) $39 + 5x = 109 + -5x$

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____



Find the value of x.

Answers

$$1) \quad 2x + 38 = 102 + -6x$$
$$8x = 64$$
$$x \equiv 8$$

$$2) \quad 100 + -3x = 136 + -7x$$

$$\textcolor{red}{4x = 36}$$

$$\textcolor{red}{x = 9}$$

8

8

$$3) \quad -2x + 32 = -7x + 62$$

$$\textcolor{red}{5x = 30}$$

$$\textcolor{red}{x = 6}$$

$$4) \quad 57 - 1x = 77 - 6x$$
$$5x = 20$$
$$x = 4$$

4

4

$$5) \quad 4x + 56 = -5x + 74$$
$$\textcolor{red}{9x = 18}$$
$$\textcolor{red}{x = 2}$$

$$\begin{aligned} 6) \quad -3x + 40 &= 56 - 5x \\ 2x &= 16 \\ x &\equiv 8 \end{aligned}$$

1. _____

3

$$7) \quad -4x + 56 = -6x + 62$$
$$2x = 6$$
$$x = 3$$

$$8) \quad 86 - 2x = -9x + 107$$
$$7x = 21$$
$$x = 3$$

— 1 —

$$9) \quad 2x - 7 = 29 - 2x$$

$$4x = 36$$

$$x = 9$$

$$10) \quad 36 + 1x = -9x + 56$$
$$10x = 20$$
$$x = 2$$

III

$$11) \quad 45 + -4x = -13x + 108$$
$$9x = 63$$
$$x = 7$$

$$12) \quad 39 + 5x = 109 + -5x$$
$$10x = 70$$
$$x = 7$$



Determining Variable Value to Balance Equations

Name: _____

Find the value of x.

2
86
39
83
24
9Answers

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

1) $2x + 38 = 102 + -6x$

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