



Determining Variable Value to Balance Equations

Name: _____

Find the value of x.

1) $-5x + 21 = 35 - 12x$

2) $-4x + 113 = 158 - 9x$

3) $1x + 16 = 22 - 2x$

4) $76 + 1x = 124 + -7x$

5) $-2x + 44 = 94 + -7x$

6) $9 + 3x = 39 + -3x$

7) $22 - 3x = 34 - 6x$

8) $-1x + 70 = -3x + 78$

9) $5x + 2 = 1x + 14$

10) $1x + 78 = 98 + -4x$

11) $25 - 2x = -6x + 45$

12) $12 + 2x = -6x + 60$

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

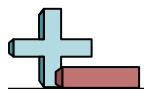
8. _____

9. _____

10. _____

11. _____

12. _____



Find the value of x.

$$1) \quad -5x + 21 = 35 - 12x$$
$$\textcolor{red}{7x = 14}$$
$$\textcolor{red}{x = 2}$$

$$2) \quad -4x + 113 = 158 - 9x$$
$$5x = 45$$
$$x = 9$$

$$3) \quad 1x + 16 = 22 - 2x$$
$$\textcolor{red}{3x = 6}$$
$$\textcolor{red}{x = 2}$$

$$4) \quad 76 + 1x = 124 + -7x$$
$$8x = 48$$
$$x = 6$$

$$5) \quad -2x + 44 = 94 + -7x$$
$$5x = 50$$
$$x = 10$$

$$\begin{aligned} 6) \quad 9 + 3x &= 39 + -3x \\ 6x &= 30 \\ x &= 5 \end{aligned}$$

$$7) \quad 22 - 3x = 34 - 6x$$
$$3x = 12$$
$$x = 4$$

$$8) \quad -1x + 70 = -3x + 78$$
$$2x = 8$$
$$x = 4$$

$$9) \quad 5x + 2 = 1x + 14$$
$$4x = 12$$
$$x = 3$$

$$10) \quad 1x + 78 = 98 + -4x$$
$$5x = 20$$
$$x = 4$$

$$11) \quad 25 - 2x = -6x + 45$$

$$4x = 20$$

$$x = 5$$

$$12 + 2x = -6x + 60$$
$$8x = 48$$
$$x = 6$$

Answers

1 2

9

9

3. 2

6

5. 10

5

4

4

3

10. **4**

11. **5**

12. **6**



Determining Variable Value to Balance Equations

Name: _____

Find the value of x.

2
64
24
104
59
3Answers

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

1) $-5x + 21 = 35 - 12x$

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10) $1x + 78 = 98 + -4x$