

1. Solve for x .

$$6 + x = 7$$

$$x = 7 - 6$$

$$x = 1$$

2. Solve for y

$$y/3 = 48$$

$$y = 48 \times 3$$

$$y = 144$$

3. Solve for y

$$7y/3 = 14$$

$$7y = 14 \times 3$$

$$7y = 42$$

$$y = 42/7$$

$$y = 6$$

4. Solve for x .

$$184 = -x + 63$$

$$x = 63 - 184$$

$$x = -121$$

5. For each value of w , determine whether it is a solution to $6 - 8w = -2$.

w	Is it a solution?	
	Yes	No
0	☐	☒
5	☐	☒
- 3	☐	☒
1	☒	☐

6. Solve for u .

$$14 = 2u - 8$$

$$2u = 14 + 8$$

$$2u = 22$$

$$u = 11$$

7. Solve for x .

$$x + 29 = 48$$

$$x = 48 - 29$$

$$x = 19$$

8. Solve for x .

$$3x + 63 + 2x = 8$$

$$5x = 8 - 63$$

$$5x = -55$$

$$x = -11$$

9. Solve for x .

$$-16 = -7x + 3x + 24$$

$$-16 = -4x + 24$$

$$4x = 24 + 16$$

$$4x = 40$$

$$x = 10$$

10.

$$\begin{aligned}3y - 5 &= 2y \\3y - 2y &= 5 \\y &= 5\end{aligned}$$

11.

$$-2(x + 4) + 6x = 4(x - 3)$$

☒ No solution

$$x =$$

☐ All real numbers are solutions

$$2(u - 1) + 8 = 6(2u - 4)$$

☐ No solution

$$u = 3$$

☐ All real numbers are solutions

12. A washer and a dryer cost \$1007 combined. The washer costs \$57 more than the dryer. What is the cost of the dryer?

$$x + x + 57 = 1007$$

$$2x = 1007 - 57$$

$$2x = 950$$

$$x = 475$$

cost of the dryer = \$475

13. What is 80% of 46?

$$80/100 \times 46 = 36.8$$

14. The price of an item has been reduced by 85%. The original price was \$63. Use a calculator to find the price of the item now

$$100 - 85 = 15\%$$

$$15/100 \times 63 = \$9.45$$

$$15. \quad 23/100 \times 110000 = 25300$$

17.

$$x - 13 < -11$$

$$x < -11 + 13$$

$$x < 2$$

18. Solve the inequality for u .

$$-15 > -5u$$

Dividing both sides by -5

$$3 < u$$

19. Solve the inequality for x .

$$-2 + 5x \leq 18$$

$$5x \leq 18 + 2$$

$$5x \leq 20$$

$$x \leq 4$$

20. Solve the inequality for w .

$$5 - 4w \leq 13 - 2w$$

$$-4w + 2w \leq 13 - 5$$

$$-2w \leq 8$$

$$w \geq -4$$