

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

# 4.1.A

## Solving One-Step Equations

- 1) Your goal is to get the variable  $x$  alone. Isolate the variable on one side.
- 2) Always perform the same operation to both sides of an equation.
- 3) To undo an operation, perform its opposite operation to both sides of an equation.
- 4) Opposite operations are the same as inverse operations.
- 5) Solve for  $x$ .
- 6) Check your answer by substituting it back into the original equation.
- 7) Finish your check to make sure you did it right.

1)  $x + 4 = 23$

2)  $30 = 6x$

3)  $3x = 21$

4)  $x - 12 = 21$

5)  $\frac{x}{5} = 7$

6)  $4x = 28$

7)  $21 = x + 5$

8)  $-2 = -5 + x$

9)  $12 = 2x$

10)  $-3x = 21$

11)  $-7 = x - 5$

12)  $\frac{x}{-5} = 3$

13)  $36 = 3x$

14)  $x - 12 = -12$

15)  $-3x = -42$

16)  $-5 + x = 30$

17)  $x - 18 = -42$

18)  $\frac{x}{-6} = -2$

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

**4.1.B**

## 4.1B – One step word problems

*Write and solve an equation for each problem. Remember to show all work and label your answer!*

1) Robyn had some video games, and then bought 4 more games. If she now has a total of 10 games, how many did she start out with?

Let  $x =$  \_\_\_\_\_

Equation: \_\_\_\_\_

Answer: \_\_\_\_\_

2) Mrs. Danzer's car can travel an average of 24 miles on each gallon of gasoline. How many gallons of gas will she need to travel 348 miles?

Let  $x =$  \_\_\_\_\_

Equation: \_\_\_\_\_

Answer: \_\_\_\_\_

3) Three friends found some money on the playground. They split the money evenly, and each person got \$14. How much money did they find on the playground?

Let  $x =$  \_\_\_\_\_

Equation: \_\_\_\_\_

Answer: \_\_\_\_\_

4) An angelfish can grow to be 12 inches long. If an angelfish is 8.5 inches more than a clownfish, how long is a clownfish?

Let  $x =$  \_\_\_\_\_

Equation: \_\_\_\_\_

Answer: \_\_\_\_\_

5) Josh sent 574 text messages last week. On average, how many text messages did he send each day? (*remember: a week is 7 days*)

Let  $x =$  \_\_\_\_\_

Equation: \_\_\_\_\_

Answer: \_\_\_\_\_

6) In a recent presidential election, Ohio had 18 electoral votes. This is 20 votes less than Texas had, how many electoral votes did Texas have?

Let  $x =$  \_\_\_\_\_

Equation: \_\_\_\_\_

Answer: \_\_\_\_\_