

# Simple Algebraic Expressions with Addition

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

Date: \_\_\_\_\_

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## Part A: Write the algebraic expression

Write an expression for each description using the variable given.

1. Add 7 to  $n$  \_\_\_\_\_

2. The sum of  $x$  and 12 \_\_\_\_\_

3. 5 more than  $m$  \_\_\_\_\_

4.  $p$  increased by 9 \_\_\_\_\_

5. 15 added to  $y$  \_\_\_\_\_

## Part B: Evaluate the expressions

Find the value of each expression when the variable has the given value.

6.  $a + 6$ , when  $a = 4$  \_\_\_\_\_

7.  $b + 11$ , when  $b = 7$  \_\_\_\_\_

8.  $8 + c$ , when  $c = 15$  \_\_\_\_\_

9.  $d + 20$ , when  $d = 25$  \_\_\_\_\_

10.  $13 + e$ , when  $e = 9$  \_\_\_\_\_

## Part C: Solve for the variable

Find the value of the variable in each equation.

11.  $x + 5 = 12$       $x =$  \_\_\_\_\_

12.  $n + 8 = 14$       $n =$  \_\_\_\_\_

13.  $10 + m = 23$       $m =$  \_\_\_\_\_

14.  $p + 7 = 19$       $p =$  \_\_\_\_\_

15.  $6 + y = 21$       $y =$  \_\_\_\_\_

## Part D: Word problems

Write an expression and solve.

16. Sarah has some marbles. Her friend gives her 8 more marbles. Now she has 20 marbles. How many marbles did Sarah have at the start?

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

**17.** A box contains some books. If you add 12 more books, there will be 30 books in total.  
How many books are in the box now?

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