

Homework

Name: _____

Basic Algebra Vocabulary

In algebra, a **variable** is an unknown quantity. It is often represented by a letter. With a red crayon, circle the variables (or unknown amount) in each of the expressions below.

$6 + x$

$y - 9$

$8z$

$\frac{16}{v}$

A **constant** is a quantity with a value that does not change. It is usually represented by a number. With a blue crayon, circle the constants (or numerical amounts) in each of the expressions below.

$4 + n$

$d - 9$

$2 - m$

$5 + a$

An **expression** is a mathematical phrase with constants, variables, and/or operation symbols. Below each expression, tell what operation is used. Write addition, subtraction, division, or multiplication.

$y - 3$

$6m$

$7 + n$

$\frac{9}{b}$

An **equation** is a mathematical statement that uses an equal sign to show that two or more expressions are equal. Tell whether each item below is an equation or expression.

$9 - n = 15$

$\frac{9}{b}$

$2c = 4$

$8 + a$

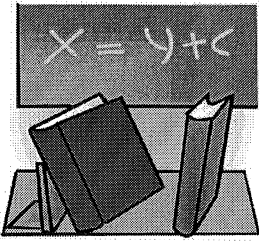
$2 + x = 12 + 7$

Is the mathematical statement shown above an equation or an expression? _____

How many variables are in this statement? _____ How many constants? _____

Name: _____

Basic Algebra



Evaluate each expression.

$$a = 3, \quad b = 5, \quad c = 6$$

1. $a + 5$ _____

2. $15 - c$ _____

3. $4b$ _____

4. $\frac{18}{c}$ _____

5. $20 - a$ _____

6. $11b$ _____

7. $\frac{45}{b}$ _____

8. $a - 2$ _____

9. $a + b + c$ _____

10. $\frac{c}{a}$ _____

$$p = 12, \quad q = 2, \quad r = 30$$

11. $q50$ _____

12. $\frac{r}{q}$ _____

13. $p + 4 + 6$ _____

14. $p - 7$ _____

15. $10r$ _____

16. $\frac{r}{10}$ _____

17. $\frac{p}{4}$ _____

18. $r - p$ _____

19. $r - q$ _____

20. $\frac{48}{p}$ _____

Now try this:

Write five of your own algebraic expressions on the back of this paper. Have a friend solve them.