

Lesson 15: Read Expressions in Which Letters Stand for Numbers

Classwork

Opening Exercise

Complete the graphic organizer with mathematical words that indicate each operation. Some words may indicate more than one operation.

<u>ADDITION</u>	<u>SUBTRACTION</u>	<u>MULTIPLICATION</u>	<u>DIVISION</u>	<u>EXPONENTS</u>
Sum Add More than total Altogether In all Increased by Plus	Difference Subtract fewer than minus less than How many more left decreased by	Product Multiply Times Every Double, Triple of As much Each	Quotient Divide Each Per Split	Power Squared Cubed

Example 1

Write an expression using words.

- a. $a - b$ a minus b
 The difference of a and b.
 a decreased by b.
 b subtracted from a.

- b. xy
 The product of x and y.
 x multiplied by y.
 x times y.

- c. $4f + p$ p added to the product of 4 and f .
4 times f plus p .
the sum of 4 multiplied by f and p .
- d. $d - b^3$ d minus b cubed.
The difference of d and the quantity b to the third power.
- e. $5(u - 10) + h$ Add h to the product of 5 and the difference of u and 10.
5 times the quantity of u minus 10 added to h .
- f. $\frac{3}{d+f}$ Find the quotient of 3 and the sum of d and f .
3 divided by the quantity d plus f .

Exercises

Circle all the vocabulary words that could be used to describe the given expression.

1. $6h - 10$

ADDITION

SUBTRACTION

MULTIPLICATION

DIVISION

2. $\frac{5d}{6}$

SUM

DIFFERENCE

PRODUCT

QUOTIENT

3. $5(2 + d) - 8$

ADD

SUBTRACT

MULTIPLY

DIVIDE

4. abc

MORE THAN

LESS THAN

TIMES

EACH

Write an expression using vocabulary to represent each given expression.

5. $8 - 2g$ 8 minus the product of 2 and g .
2 times g subtracted from 8
8 decreased by g doubled.
6. $15(a + c)$ 15 times the quantity of a increased by c .
The product of 15 and the sum of a and c .
15 multiplied by the total of a and c .
7. $\frac{m+n}{5}$ The sum of m and n divided by 5. The quotient of the total of m and n and 5.
 m plus n split into 5 equal groups.
8. $b^3 - 18$ b cubed minus 18
 b to the third power decreased by 18.
9. $f - \frac{d}{2}$ f minus the quotient of d and 2.
 d split into 2 groups and subtracted from f .
 d divided by 2 less than f .
10. $\frac{u}{x}$ u divided by x
The quotient of u and x .
 u divided into x parts.