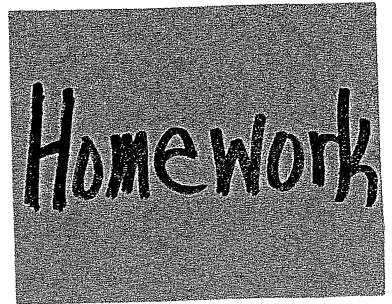


Name _____

Write Algebraic Expressions



Word problems use expressions that you can write with symbols. An **algebraic expression** has at least one variable. A **variable** is a letter or symbol that represents one or more numbers. Writing algebraic expressions for words helps you solve word problems.

These are a few common words that are used for operations.

add (+)

sum
increased by
plus
more than

subtract (-)

difference
minus
decreased by
less
less than

multiply (×)

product
times

divide (÷)

quotient
divided by

17 more than x
 $x + 17$

“More than” means add.
“17 more than x ” means add 17 to x .

four times the sum of 7 and n
 $4 \times (7 + n)$

“Times” means multiply.
“Sum” means add.
The words mean multiply 4 by $(7 + n)$.

A number next to a variable always shows multiplication.
For example, $5n$ means the same as $5 \times n$.

Write an algebraic expression for the word expression.

1. b divided by 9

2. c more than 5

3. d decreased by 29

4. 8 times g

5. p increased by 12

6. the quotient of k and 14

7. 17 less than the product of 3 and m

8. 2 less than the quotient of d and 16

Name : _____

You may use a calculator

Order of Operations

1) $(12 + 3) + 20 \div 10$

6) $(14 + 18) \div (8 - 4)$

2) $(12 + 22 - 6) \div 14$

7) $(16 - 3) + 15 \div 3$

3) $6 \times 10 \times (7 - 2)$

4) $(13 - 7) \times 9 + 4$

5) $(17 - 2) \times 9 - 5$

Order of Operations

P E M D A S

()

x^2

\times or \div

$+$ or $-$



from left to right

Parenthesis

E xponents

M ultiplication

D ivision

A ddition

S ubtraction