

WORD PROBLEMS

Translating Words into Algebraic Expressions

ADDITION

more than
sum of
increased by
added to
greater than
plus
older than

SUBTRACTION

decreased by
less than
difference between
smaller than
fewer than
diminished by
minus
years ago
younger than

MULTIPLICATION

double, triple
twice
product
of a
times
percent

DIVISION

divided by
one-fifth of, one-half of, ...

EQUALITY (=)

are gives
is will be
makes equals
yields
has a value of
has a result of
is equal to

UNKNOWN VARIABLE

unknown number
quantity
value
measured item
weight

Examples:

<u>Word Phrase</u>	<u>Algebraic Expression</u>
Seven plus a number	$7 + x$
Three times a value minus one	$3x - 1$
Some weight decreased by four	$x - 4$
A number divided by eight	$x/8$
One-fourth of a number	$x/4$ or $\frac{1}{4}x$
Twice a measured item	$2x$
Five times the sum of a number and twelve	$5(x + 12)$
Three times a number minus five is equal to twenty-seven.	$3x - 5 = 27$
Four subtracted from one-half a number yields thirteen.	$x/2 - 4 = 13$
Twice a value plus one gives two	$2x + 1 = 2$