

Math Sheet

Name _____ Score _____ Teacher _____ Date _____

Words and Algebraic Expressions

Use meaning, order, and grouping to turn words into algebra.

Addition

Addition joins quantities. "More than" reverses the spoken order but not the addends' value.

the sum of x and 5

$$x + 5$$

5 more than x

Subtraction

Subtraction order matters: the quantity named after "from" or "than" comes first.

5 less than x

$$x - 5$$

5 subtracted from x

Multiplication

A coefficient multiplies the complete factor that follows it; a fractional coefficient means that fraction of a quantity.

the product of 3 and x

$$3x$$

3 times x

1 over 2 of x

$$\frac{1}{2}x$$

the product of 1 over 2 and x

Division

The dividend is divided by the divisor. In "4 divided into x," x is the dividend and 4 is the divisor.

4 divided into x

$$\frac{x}{4}$$

x divided by 4

x divided into 4

$$\frac{4}{x}$$

x must not be zero because a divisor cannot be zero.

Equality

An equals sign says that both sides have the same value; it is not a cue to start calculating.

the sum of x and 2 = 3 times y

$$x + 2 = 3y$$

Both expressions name the same value.

Grouped quantities

Parentheses make one quantity. An outside factor multiplies every term inside the group.

2 times the grouped quantity (the sum of x and 3)

$$2(x + 3)$$

$$2x + 6$$

Context matters: words such as "of," "shared," and "sold for" do not always name one operation.