Algebraic Expressions

Translate verbal words/phrases into equations

- Step 1: Assign a _____ to represent the _____.
- Step 2: Identify _____ that indicate (points out) _____

Operation	Key Word/Phrase	Example	Translation
Addition (+)	plus	A number plus three	$x + 3$
	more than	Ten more than a number	$x + 10$
	the **sum** of	The sum of a number and five	$x + 5$
	the **total** of	The total of six and some number	$6 + x$
	increased by	A number increased by two	$x + 2$
	added to	Eleven added to a number	$x + 11$
Subtraction (−)	minus	A number minus seven	$x - 7$
	less than	Four less than a number	$x - 4$
	the difference of	The difference of a number and three	$x - 3$
	less	Nine less a number	$9 - x$
	decreased by	A number decreased by twelve	$x - 12$
	subtracted from	Six subtracted from a number	$x - 6$
Multiplication (x)	times	Eight times a number	$8x$
	the **product** of	The product of fourteen and a number	$14x$
	twice; double	Twice a number; double a number	$2x$
	multiplied by	A number multiplied by negative six	$-6x$
	of	Three fourths of a number	$\frac{3}{4}x$
Division (÷)	the **quotient** of	The quotient of a number and seven	$\frac{x}{7}$
	divided by	Ten divided by a number	$\frac{10}{x}$
	the ratio of	The ratio of a number to fifteen	$\frac{x}{15}$
Powers (x^n)	the square of; squared	The square of a number; a number squared	x^2
	the cube of; cubed	The cube of a number; a number cubed	x^3
Equals (=)	equals	Seven less than a number **equals** ten.	$x - 7 = 10$
	is	Three times a number **is** negative six.	$3x = -6$
	is the same as	Eight **is the same as** twice a number.	$8 = 2x$
	yields	Twelve added to a number yields five.	$x + 12 = 5$
	amounts to	Nine less a number **amounts to** twenty.	$9 - x = 20$

LIVEWORKSHEETS

DO NOW!

❖ Translate each erbal phrase into an equations.

(1) The sum of a number and three gives five. _____

(2) Two multiplied by a number is equal to eight. _____

(3) Difference between a number and twenty three is twelve. _____

(4) Eleven times a number is thirty three. _____

(5) One-half of a number is equal to three. _____

(6) Combine three and five times a number gives eighteen. _____

(7) Subtract three from quarter of a number is 6. _____

(8) Product of two and the difference between a number and one is fourteen. _____

(9) 3 divides the difference betwwen h and 4 represents five. _____

(10) Subtract four from twice of a number is seven times a number. _____

❖ Translate each equation into a verbal phrase.

(1) $9y = 27$ _____

(2) $x - 18 = 9$ _____

(3) $\frac{y}{12} = 3$ _____

(4) $2c - 5 = 8$ _____

(5) $7(b + 2) = 14$ _____

(6) $\frac{a}{2} - 20 = 3$ _____

LIVEWORKSHEETS