

Notes: Writing Equations from Verbal Statements

Lets think of some mathematical words that can work for the following math symbols

+		-	
×		÷	
<		>	
≤		≥	
=		≠	
$x, y, z \dots$ or any variable			

Write down the key words that you should use when dealing with the following algebraic expressions.

$$5 + 2 = 7$$

$$2 * x > 10$$

$$\frac{15}{n}$$

$$n - 6$$

Write each verbal expression as an algebraic expression.

A number decreased by 11

The product of 6 and 7

The product of a number and 12 is greater than 39

The difference of a number and 12

8 more than a number

The sum of n and 7 is less than or equal to 36

The quotient of 10 and a number is no more than 51

The product of a number and 12 is at least 70.

The highest temperature recorded in the US was 134°F at Death Valley, California in 1913. Use only this fact to write an algebraic expression that describes the temperature in the US.

You are checking a bag at an airport. Bags can weigh no more than 50 pounds. Your bag weighs 16.8 pounds. Find the possible weights w (in pounds) that you can add to the bag.

Notes: Writing Equations from Verbal Statements

Lets think of some mathematical words that can work for the following math symbols

$+$	Sum, ADD, MORE	$-$	subtract, less, difference
\times	product, of, times	\div	divide, quotient
$<$	less than	$>$	Greater than
\leq	less than or equal to at most, no more than	\geq	Greater than or equal to at least
$=$	is, equal	\neq	not equal to
$x, y, z \dots$ or any variable	a number		

Write down the key words that you should use when dealing with the following algebraic expressions.

$$5 + 2 = 7$$

Sum, equals

$$2 * x > 10$$

Product, greater than

$$\frac{15}{n}$$

quotient, a number

$$n - 6$$

a number, difference

Write each verbal expression as an algebraic expression.

A number decreased by 11

$$x - 11$$

The product of 6 and 7

$$6(7)$$

The product of a number and 12 is greater than 39

$$12x > 39$$

The difference of a number and 12

$$x - 12$$

8 more than a number

$$8 + x$$

The sum of n and 7 is less than or equal to 36

$$n + 7 \leq 36$$

The quotient of 10 and a number is no more than 51

$$\frac{10}{x} \leq 51$$

The product of a number and 12 is at least 70.

$$12x \geq 70$$

The highest temperature recorded in the US was 134°F at Death Valley, California in 1913. Use only this fact to write an algebraic expression that describes the temperature in the US.

$$x \leq 134$$

x is the temperature that is possible in the U.S.

You are checking a bag at an airport. Bags can weigh no more than 50 pounds. Your bag weighs 16.8 pounds. Find the possible weights w (in pounds) that you can add to the bag.

$$x + 16.8 \leq 50$$

x is the weight that can be added to equal 50 lbs. or less.

Name: _____ Date: _____ Period: _____

Homework Writing Verbal Expressions as Algebraic Expressions

Write each as an algebraic expression

1. **a number increased by 5**

$$x + 5$$

2. **half of 16** MULTIPLICATION

$$\frac{1}{2}(16) \text{ OR } \frac{16}{2}$$

3. **the product of 5 and 7** MULTIPLY

$$5(7)$$

4. **a number is greater than 31**

$$x > 31$$

5. **8 more than w**

$$8 + w$$

6. **the sum of a number and 12 is greater than or equal to 52**

$$x + 12 \geq 52$$

7. **12 is no more than 39**

$$12 \leq 39$$

8. **29 minus 15**

$$29 - 15$$

9. **The product of 6 and a number**

$$6x$$

10. **10 less than a number is 52** ORDER MATTERS

$$x - 10 = 52$$

11. **the quotient of a number and 6 is no more than 11**

$$\frac{x}{6} \leq 11$$

12. **6 more than a number is 12**

$$6 + x = 12$$

13. **the product of 5 and a number is at least 25**

$$5x \geq 25$$

14. **the quotient of a number and 15 is decreased by 11**

$$\frac{x}{15} - 11$$

15. **twice a number increased by 11 is at most 72**

$$2x + 11 \leq 72$$

Name: _____ Date: _____ Period: _____

Homework Writing Verbal Expressions as Algebraic Expressions

Write each as an algebraic expression

1. *a number increased by 5*
2. *half of 16*
3. *the product of 5 and 7*
4. *a number is greater than 31*
5. *8 more than w*
6. *the sum of a number and 12 is greater than or equal to 52*
7. *12 is no more than 39*
8. *29 minus 15*
9. *The product of 6 and a number*
10. *10 less than a number is 52*
11. *the quotient of a number and 6 is no more than 11*
12. *6 more than a number is 12*
13. *the product of 5 and a number is at least 25*
14. *the quotient of a number and 15 is decreased by 11*
15. *twice a number increased by 11 is at most 72*