Math 6/7 NOTES (5.4) Name:_____

Translating Verbal Phrases to Algebraic Expressions

To translate statements into expressions and equations:

- Identify _____ _____ that indicate the operation.
- Write the numbers/variables in the correct order.

KEY WORDS

The **SUM** of	_____	and _____ :	_____
The **DIFFERENCE** of	_____	and _____ :	_____
The **PRODUCT** of	_____	and _____ :	_____
The **QUOTIENT** of	_____	and _____ :	_____

Write each verbal phrase as an algebraic expression.

1) the sum of 8 and *t*

2) the quotient of *g* and 15

3) the product of 5 and *b*

4) the difference of 32 and *x*

KEY WORDS **LESS THAN (the first number subtracted from the second!**

MORE THAN (the first number added to the second!

SWITCH THE ORDER OF THE TERMS!

Write the phrase ***five dollars less than Jennifer earned*** as an algebraic expression.

Key Words	*five dollars* ***less than*** *Jennifer earned*
Variable	Let **d** represent # of $ Jennifer earned
Expression	**d – 5**

5) Eight more than *x*

6) Six less than p

7) 14 less than f

8) p more than 10

9) 3 more runs than Pirates scored

10) 12 less than some number

LIVEWORKSHEETS

KEY WORDS **IS, EQUALS, IS EQUAL TO... Substitute with equal sign.**

11) Arthur is 8 years younger than Janet

12) Kelly's test score is 6 points higher than Mike's

13) 5 more than a number is 6.

14) The product of 7 and *b* is equal to 63.

15) The sum of *r* and 45 is 79.

16) The quotient of *x* and 7 is equal to 13.

KEY WORDS **TWICE = DOUBLE = 2 times a number = multiply by 2**

HALF = divide the number by 2

17) Twice as many points as Bob

18) Half the age of Sally

Writing Two-Step Expressions and Equations

YOU MUST USE PARENTHESES to x or ÷ a (SUM) or (DIFFERENCE)!

19) Six less than twice a number *x* is four

20) Four more than the product of 2 and *a*

21) Nine times a number decreased by four

22) Two less than the quotient of 15 and a number

23) Five times the sum of six and some number

24) The quotient of 7 and d decreased by 9

25) Twice the difference of y and three

26) The difference of 9 and the quotient of s and –4

27) The **sum of** 5 **and** product of 7 and x

28) Three more than quotient of 5 and *a*

29) The product of 4 and the difference of x and 3

30) The product of the difference of x and 3 and 4

LIVEWORKSHEETS

Math 6/7 Homework (5.4) Name:_____

Addition Phrases	Expression	Subtraction Phrases	Expression
8 **more than** a number The **sum** of 8 and a number x **increased by** 8 the **total** of x and 8	x + 8	The **difference** of r and 6 r **decreased by** 6 6 **less than** a number 6 **subtracted from** a number	r - 6
Multiplication Phrases	**Expression**	**Division Phrases**	**Expression**
Twice a number The **product** of 2 and n 2 **multiplied by** a number 2 **times** a number	2n	The **quotient** of z and 3 A number **divided by** 3 The **ratio** of z and 3	$\frac{z}{3}$

Translate each verbal phrase into an algebraic expression or equation.

1) Seven less than a number is 15

2) The total of 5 and c

3) 7 less than m

4) The sum of a number and 16 is 23

5) the score increased by 8 points

6) The quotient of w and 10 is equal to 7

7) 17 more than some number is 57

8) $12 less than the original price is $48

Translate each algebraic expression or equation into a verbal phrase.

9) $9y$ _____

10) $x - 8 = 14$ _____

11) $\frac{y}{12} = 24$ _____

12) $k + 12$ _____

LIVEWORKSHEETS

Translate each verbal phrase into an algebraic expression or equation.

13) Seven more than the quotient of a number and 2 is 10.

14) Five less than twice a number is 7.

15) One less than the product of four and a number is 11.

16) Six less than six times a number is 12.

17) Ten more than the quotient of a number and 3 is 12.

18) Seven more than twice a number is 1.

19) The sum of 9 and the quotient of x and 7 is 11.

20) The product of 8 and the difference of n and 3.

Translate each expression or equation into a verbal phrase.

21) **$2(5 + t) = 8$** _____

22) $\frac{a}{-2} - 10 = 3$ _____

23) **$7(b + 2)$** _____

24) **$2c - 5$** _____

25) **$17(y + 11)$** _____

26) **$3b - 8$** _____

27. The sum of a number and 16 is equal to 45.

28. The product of 6 and *m* is 216.

29. The difference of 100 and *x* is 57.

30. The quotient of *z* and 10 increased by 32.

31. $18 less than the original price is $48.

32. 17 more than some number is equal to 85.

33. The number of members divided by 6 is 15.

34. The total of Joshua's savings and $350 is $925.

LIVEWORKSHEETS