

Translating Expressions

Translating Phrases

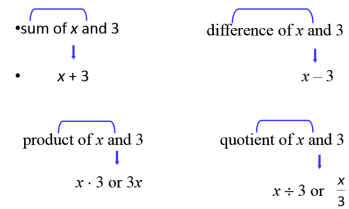
Addition	Subtraction	Multiplication	Division
sum	minus	product	divided by
plus	subtracted from	twice	quotient
more than	difference of	times	ratio
added to	less than	multiplied by	divided into
increased by	decreased by	of	
	less		
	Order is important!!		Order is important!!

Translating Phrases

Operation	Variable Expression	Word Phrases
Subtraction	$y - 6$	Some number minus six
		Six subtracted from some number
		The difference of some number and six
		Six less than some number
		Some number decreased by six

Translating Phrases

The key words *sum*, *difference*, *product*, and *quotient* indicate the **answer** for their respective operations.



$$8[5 + (4n)] + 6$$

Example

5 plus the quantity of 4 times a number

$$5 + (4 \cdot n) \quad (5 + 4n)$$

Now take the product of 8 and that expression and then add 6.

$$8(5 + 4n) + 6 \quad 40 + 32n$$

Example

The difference of two numbers decreased by the sum of 3 and another number (hint: three different variables)

$$(x - y) - (3 + k)$$

Example

- The quotient of 5 and a number increased by the sum of 10 and another number

$$\frac{(5 \div z) + (10 + g)}{+ 10 + g}$$

Example

- The quotient of 4 less than a number and 5.



Translate: Thirty-two less than three times a number is fifteen.

- a) $32 - 3x = 15$
- b) $3x - 32 = 15$
- c) $32 + 3x = 15$
- d) $3x + 32 = 15$

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Translate: The quotient of four less than a number and five is the same as the number divided by eight.

- a) $\frac{4 - n}{5} = 8n$
- b) $5(n - 4) = 8n$
- c) $\frac{5}{n - 4} = \frac{8}{n}$
- d) $\frac{n - 4}{5} = \frac{n}{8}$

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