

# 1.3 Write Expressions

• Translate from English to Math

Operation	English	Math
<u>Add</u> : sum, plus, total, more than, increased by	sum of 2 and x a number n <u>plus</u> 7	$2+x$ $n+7$
<u>Subtract</u> : difference, less than, minus, decreased by	the <u>difference</u> of a # n and 6 5 <u>less than</u> y * dyslexic ↗	$n-6$ $y-5$
<u>Multiply</u> : times, product, multiplied by, of	<del>12 times a # y</del> $\frac{1}{3}$ of a number x	<del><math>12y</math></del> $\frac{1}{3}x$
<u>Divide</u> : quotient, divided by, divided into, per	the quotient of k and 8	$\frac{k}{8}$

## Example 1 -

a) 4 less than 6 times n      b) 3 times the sum of 7 and y  
 $6n-4$                                        $3(7+y)$

c) difference of 22 and the square of m  
 $22 - m^2$

Rate - A fraction that compares 2 quantities of different things  
 ex. miles per gallon ( $\frac{\text{miles}}{\text{gal}}$ ), \$ per hr  $\frac{\$}{\text{hr}}$ , assign per day ( $\frac{\text{assign}}{\text{day}}$ )  
 \$ per night ( $\frac{\$}{\text{night}}$ )

Unit Rate - When the denominator is 1

p18: 3-19ad

22-25, 33

Ex. A car goes 140 miles in 2 hrs. What is the unit rate (mph)

$$\frac{\text{miles}}{\text{hrs}} = \frac{140 \text{ miles}}{2 \text{ hrs}} \leftarrow \text{not 1, so divide by 2} \quad \frac{140 \div 2}{2 \div 2} = \frac{70 \text{ miles}}{1 \text{ hr}}$$

= 70 miles per hour