

1.3 Write Expressions

• Translate from English to Math

Operation	English	Math
<u>Add</u> : Sum, plus, total, more than, increased by	<u>Sum</u> of 2 and x a # n <u>plus</u> 4	$2 + x$ $n + 4$
<u>Subtract</u> : minus, less than, difference, decreased by,	the <u>difference</u> of a # n and b. 5 <u>less than</u> y <small>← switch order</small>	$n - 6$ $y - 5$
<u>Multiply</u> : times, product, of, multiplied by	$\frac{1}{3}$ of a # m $\frac{1}{3} \cdot m$	$\frac{1}{3} * m, \frac{1}{3} m$ $m \cdot \frac{1}{3}$
<u>Divide</u> : quotient, divided by, divided into	the quotient of k # 8	$\frac{k}{8}, k \div 8$

① The diff of 22 and the square of m.
 $22 - m^2$

Rate - A fraction that compares 2 different things

Ex. miles per hr, miles per gal, \$ per hr
 $\left(\frac{\text{miles}}{\text{hrs}}\right)$ $\left(\frac{\text{miles}}{\text{gal}}\right)$ $\left(\frac{\$}{\text{hr}}\right)$
 Kilometers per hr

Examples - Translate

a) 4 less than 6 times n .

$$6 \times n - 4 \quad / \quad 6n - 4$$

* b) 3 times the sum of 7 and y .

$$3(7 + y)$$

c) The difference of 22 & the square of m .

$$22 - m$$

Rate - A fraction that compares 2 different things.

ex. miles per hour, km per hr, \$ per gal
 $\left(\frac{\text{miles}}{\text{hrs}}\right)$ $\left(\frac{\text{km}}{\text{hr}}\right)$ $\frac{\$}{\text{gal}}$

\$ per hr, hours per wk
 $\left(\frac{\$}{\text{hr}}\right)$ $\left(\frac{\text{hr}}{\text{wk}}\right)$

Unit Rate - When the denominator is 1

$$\frac{140 \text{ miles} \div 2}{2 \text{ hr} \div 2} = \frac{70 \text{ miles}}{1 \text{ hr}} \text{ or } 70 \text{ mph}$$

↑
Make it a 1