

## SPACE RACE NOTES

COEFFICIENT: # IN FRONT OF THE VARIABLE  
 $d = 11.2t$  THE COEFFICIENT OF  $t$  IS 11.2

SLOPE: A MEASURE OF HOW STEEP A LINE IS.

DELTA: "THE CHANGE IN."

$$\text{SLOPE} = m = \frac{\Delta Y}{\Delta X} = \frac{\text{RISE}}{\text{RUN}} = \text{RATE OF CHANGE}$$

UNIT RATE: THE DISTANCE TRAVELED AFTER  
1 UNIT OF TIME OR THE COST OF 1 ITEM.

Unit Rate

Ex:) Determine the unit rate:

3 sodas cost \$ 15.

"PER" →

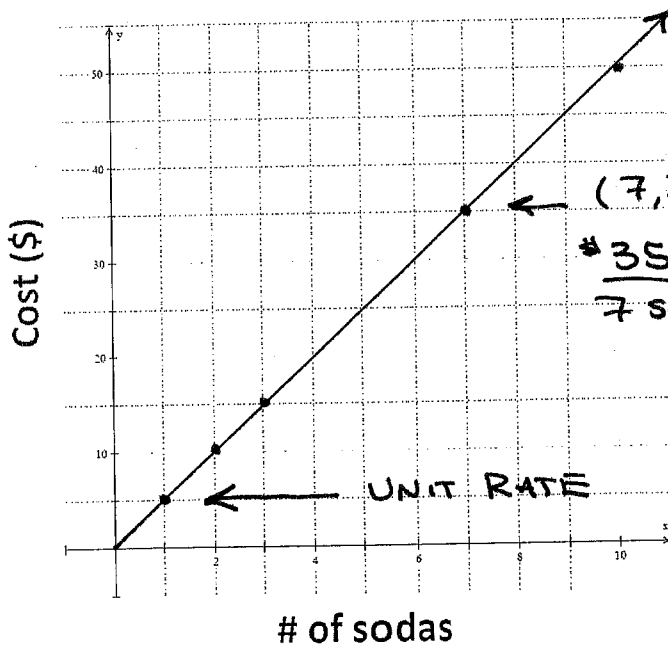
Unit Rate:  $\frac{\$}{\text{SODA}} \rightarrow \frac{\$15}{3 \text{ SODAS}} = \boxed{\frac{\$5}{1 \text{ SODA}}}$

Table of Values

Sodas (x)	1	2	3	7	10
Cost (y)	5	10	15	35	50

$$\frac{\$5}{1 \text{ SODA}} = \frac{\$10}{2 \text{ SODA}} = \frac{\$15}{3 \text{ SODAS}} = \frac{\$35}{7 \text{ SODAS}} = \frac{\$50}{10 \text{ SODAS}}$$

Graph



Equation  $y = 5x$

$$\uparrow$$

$$\frac{5}{1}$$

$$\frac{\$5}{1 \text{ SODA}}$$

$$\frac{\$35}{7 \text{ SODAS}} = \frac{\$5}{1 \text{ SODA}}$$

$$(1, 5), (2, 10), (3, 15), (7, 35), (10, 50)$$