

Dependent vs Independent Variables

## Connect

Johnny earns \$7.75 per hour that he works as a lifeguard over the summer. Write an equation that models the amount of money ( $m$ ) Johnny makes based on how many hours ( $h$ ) he works. Find at least three possible solutions to the equation.

$$m = 7.75h$$
$$7.75h = m$$

dependent variable

independent variable

$$m = 7.75h$$
$$7.75h = m$$

dependent variable

the one that "depends on" the other

put on right  
goes on vert

independent variable

"If" variable  
put on left of table  
goes on horizontal axis

h	m
1	7.75
2	15.50



### **I do**

Every week for school, Oonya reads for 75 minutes. Write an equation for the total number of minutes ( $m$ ) that she reads based on how many weeks ( $w$ ) school has been going on.

## Independent variables

## Dependent variables

"if" variable. The one you would say "IF this is 1, then what's the other. (and so on)

"this one depends on the other one"

go on left on table

go on right

go on horizontal axis of graph

go on vertical axis of graph

USUALLY has an operation being done to it

USUALLY on side of equation by itself



## **We do**

On Amazon, the price of large sized food items is \$4 more than small sized food items. Write an equation that shows the price of a large item (L) based on the price of the same smaller item (s).

**You do together  
on whiteboard**

A runner trains by running  $\frac{1}{4}$  miles laps around the Brookrood track. Write an equation that models the number of miles ( $m$ ) the runner does based on the number of laps around the track ( $t$ ) that she runs. Identify the dependent and independent variables in the equation.

**You do alone on  
index card**

Maria is six years older than her twin brothers. Write an equation that models Maria ( $m$ ) and the twins' ( $t$ ) ages. Identify the dependent and independent variables in the equation