We have seen that trends come from _graph____, but these can come from table of values as well.
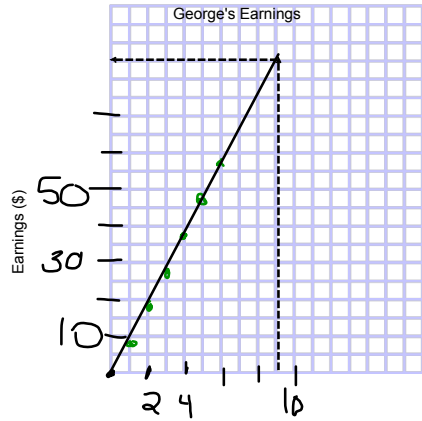
George works at a local coffee shop. He earns $9.50/h

a) Without creating a graph, describe the trend.
The relation should show a strong positive correlation and the trend would be as the number of hours he works increases, his total earnings will increase as well.

b) Create a table of values for the first 5 hours of work that he completes.

Hour	George's Earnings
1. 0	1. 0
1. 1	1. 9.50
1. 2	1. 19.00
1. 3	1. 28.50
1. 4	1. 38.00
1. 5	1. 47.50
1. 6	1. 57.00

George's Earnings

(graph with Earnings ($) on y-axis marked 10, 30, 50, and # Hours worked on x-axis marked 2, 4, 10)

c) Create an equation that represents George's pay in terms of how hours he works?

9.50 x = y

Let x represent # hours he works, y rep his total earnings

d) How much does he make if he works 9 hours?
Kayla added 9.50 9 times to get 85.50
Nadia used the equation and replaced "x" with 9
9.50 (9) = 85.50
Robyn extrapolated visually off the graph at 9 hours

e) How much does he make if he works 0 hours (he doesn't work)?
0

f) Graph the relationship.

Mar 17-6:33 PM

Taxi Fare

(graph with Cost ($) on y-axis marked 1-9, Distance in km on x-axis marked 1-8, with annotations 1.50, 1.50, (0,2) and "This is a y-intercept - where the LBF meets the y-axis")

a) What is similar about this graph?
it also has a strong positive relation and the dependent variable is about $

They both go up by an equal amount each time

b) What is different about this graph?

Comparing different variables, they go up by different amounts
The first went up by $9.50 every hour
This one is $1.50 every km

BASE Fee (initial fee, reservation fee, booking fee,

c) What information can you extract from this graph?

e) Identify what the graph goes up by? $$1.50 every 1 km

This is sometimes called the ___RATE__ of __Change_____.

Or the __SLOPE___ of __the graph_____.

d) Identify the initial value.
$2, the y-intercept, where the graph starts

f) What would the equation look like for this relationship?

y = 2 + 1.5 x

x rep the # of km

y rep total value of your taxi ride

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So generally there are two types of graphs,

1) Direct relationship which_goes through the ORIGIN (0, 0)

2) Indirect (Partial) Relations which _DO NOT go through the origin (0, #)

In the form of an equation these two types would look like

1) __y = # x (y = 9.5x)____ and 2) ___y = #x + b (y = 1.5 x + 2)___

fixed rate, initial fee

Workbook refers to constant of variation

rate of change

slope

HMWK
Wpg 81-82 #3,5, 7
pg 83-84 #1,2,3, 4 or 5

Oct 7-7:37 PM