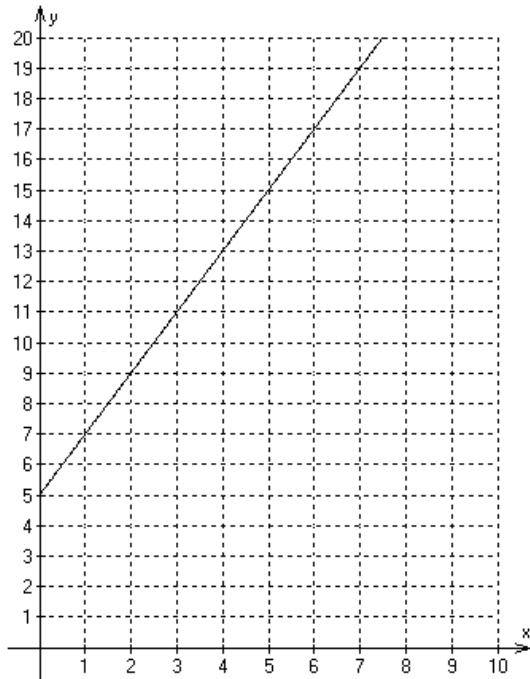


So, you think you know equations??? Try these!



1) Consider the relationship shown in the following graph:



- a) Determine an equation to represent the relationship between the variables x and y .

Equation: _____

- b) Use your equation to find the value of the y variable when x is 30.

- c) Is this relation an example of **direct variation** (dependent variable starts at 0) or **partial variation** (dependent variable does not start at 0)?

Check one:

☐ Direct variation

☐ Partial variation

2) Consider the following graph, which shows the cost of a rental.

- a) Determine an equation to model the relation.

Equation: _____

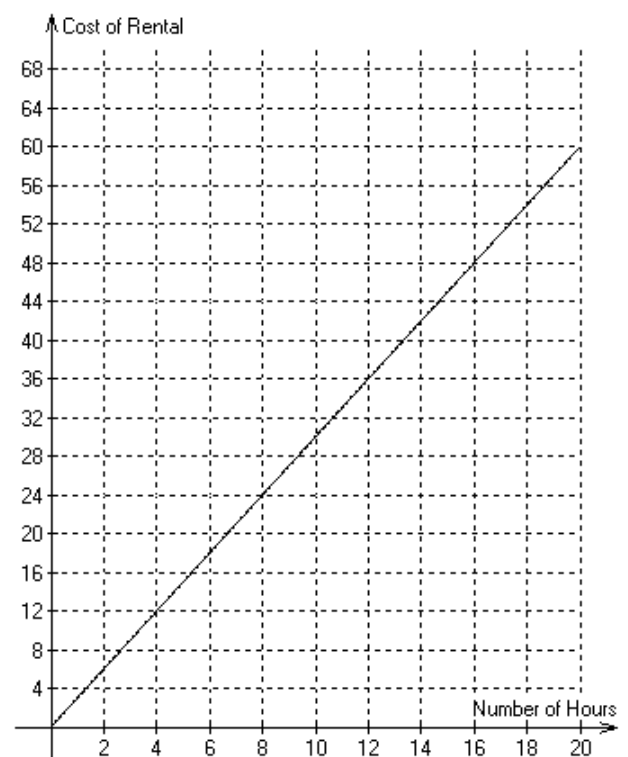
- b) Use your equation to find how much a 45-hour rental would cost.

- c) Is this relation an example of **direct variation** or **partial variation**?

Check one:

☐ Direct variation

☐ Partial variation



3) Consider the following table:

Time (seconds)	Height of Balloon (m)
0	2
1	5
2	8
3	11
4	14

a) Determine an equation to model the relation.

Equation: _____

b) Use your equation to find the height of the balloon after one minute.

c) After how many seconds will the balloon be 83 m?

a) Is this relation an example of **direct variation** or **partial variation**?

Check one: ☐ Direct variation ☐ Partial variation



4) Carlos starts at home and walks to the park, which is 50 m from his house. He walks at a speed of 1.5 m/s.

a) Determine an equation to model Carlos' **distance from home** and decide whether this equation models a direct variation or a partial variation.

Equation: _____

Check one: ☐ Direct variation ☐ Partial variation

b) Determine an equation to model Carlos' **distance from the park** and decide whether this equation models a direct variation or a partial variation.

Equation: _____

Check one: ☐ Direct variation ☐ Partial variation



5) Determine an equation to model the relationship between x and y shown in the following table. Be careful!

x	y
3	157
8	137
13	117
18	97
23	77

Equation: _____