*I can **identify an equation from a graph**.*

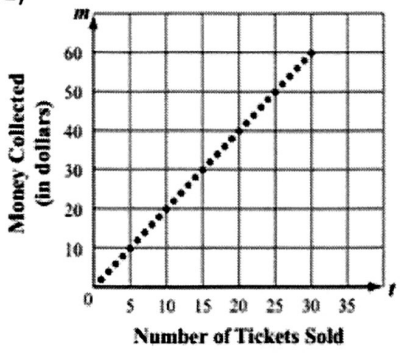
To Write an Equation from a Graph:

1) Is it proportional? (Straight AND goes through the origin)

2) Pick out points and set up a table.

3) Identify the constant of proportionality and write the equation.

1)



x	y
5	10
10	20
15	30
20	40

Straight? ✓

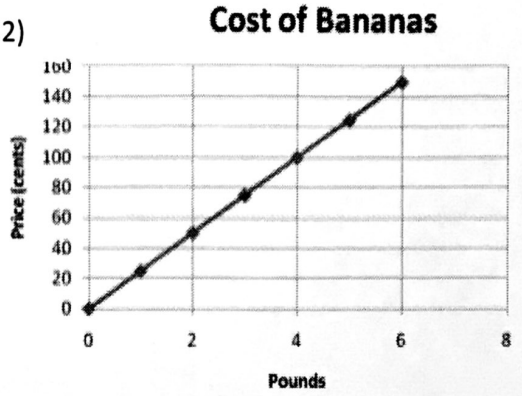
Origin? ✓

← Fill in table.

Constant of Proportionality: 2

Equation: $y = 2x$

2)



x	y
2	50
4	100
6	150

Straight? ✓

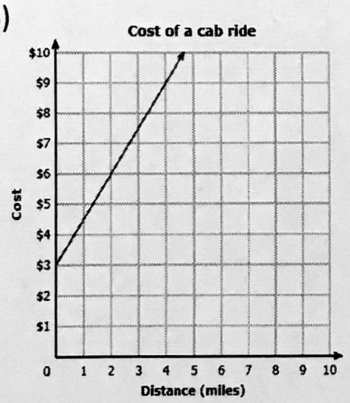
Origin? ✓

← Fill in table.

Constant of Proportionality: 25

Equation: $y = 25x$

3)



NOT PROPORTIONAL

x	y

Straight? X

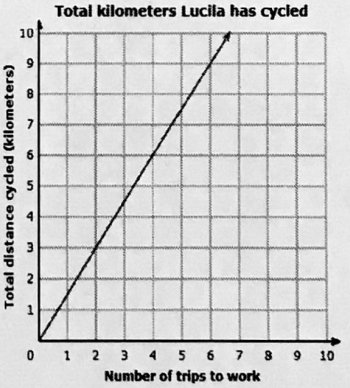
Origin? X

← Fill in table.

Constant of Proportionality: _____

Equation: _____

4)



x	y
2	3
4	6
6	9

Straight? ✓

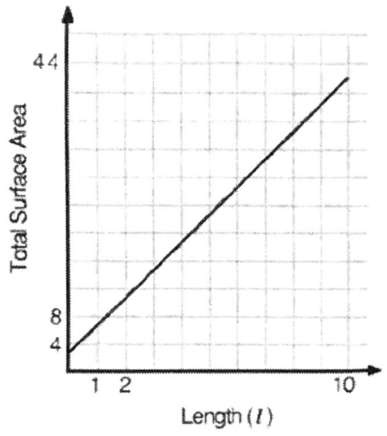
Origin? ✓

← Fill in table.

Constant of Proportionality: 1.5

Equation: $y = 1.5x$

5)



N/A

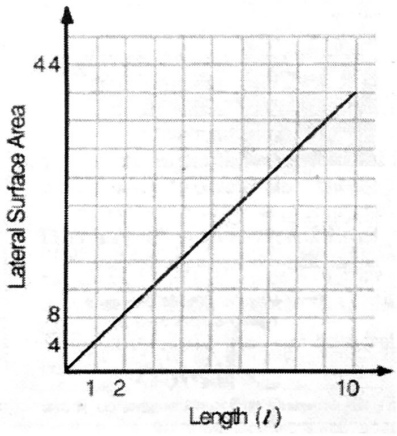
NOT PROP.

6)

N/A

NOT PROP.

7)

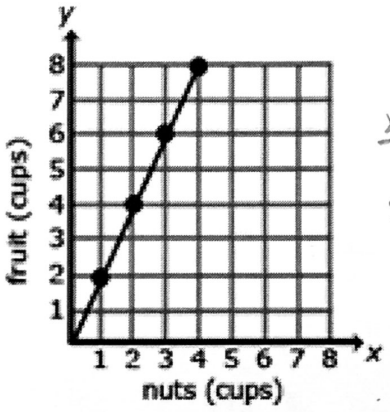


x	y
1	4
2	8

$k = 4$

$y = 4x$

8)



x	y
1	2
2	4
3	6

$k = 2$

$y = 2x$

Review:

1) Car A drives for 9 hours and travels a total of 432 miles. Car B drives for 6 hours and travels a total of 282 miles. Which car has a faster average speed?

A = 432/9 = 48 mph

B = 282/6 = 47 mph

CAR A

2) Stanley works from 8:15am until 3:00pm and earns $81.00. What is Stanley's hourly wage?

$81/6.75 hr = $12 per hour

3) Which team below has the lowest loss-to-win ratio?

Sports Team	Total Games Played	Number of Games Won
Basketball	18	15
Football	7	4
Golf	14	8
Softball	20	18

Losses	
3	3:15
3	3:4
6	6:8
2	2:18

Softball

4) What is the equation representing the table below? What is the missing value?

m	3	4.5	9	27	?
v	8.4	12.6	25.2	75.6	117.6

Equation: $V = 2.8m$ Missing Value: 42