Name: _____ Period: _____ Date Due: _____

PROPORTIONAL & NON- PROPORTIONAL RELATIONSHIPS

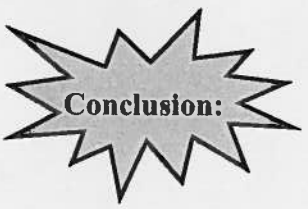
WORKSHEET 2-2
"TO BE OR NOT TO BE PROPORTIONAL"

INTERMEDIATE 1
UNIT 2

Dylan makes $336 for 32 hours of work, and Angela makes $420 for 42 hours of work.

1] How much do Dylan and Angela each make per hour?

2] Is Dylan's wage for 25 hours proportional to Amber's wage for 42 hours? Why or why not?



To determine proportionality between two ratios or rates,

_____

_____.

Find the ratio of y to x for Table 1 and Table 2, simplify the fraction to simplest form, and answer the questions that follow.

Table 1:

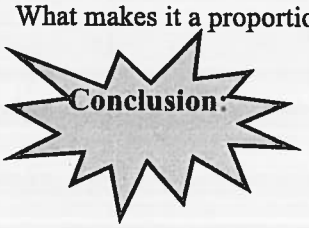
Number of Hours	Total Cost ($)	Ratio: $\frac{y}{x}$
1	$75	
2	$120	
3	$165	
4	$210	
5	$255	

Table 2:

Number of Hours	Total Cost ($)	Ratio: $\frac{y}{x}$
1	$45	
2	$90	
3	$135	
4	$180	
5	$225	

3] Which table shows a proportional relationship?

4] What makes it a proportional relationship?



To determine proportionality from a table,

_____.

Below are the graphs for the tables in the previous section. Use the graphs to determine proportionality.

Table 1:

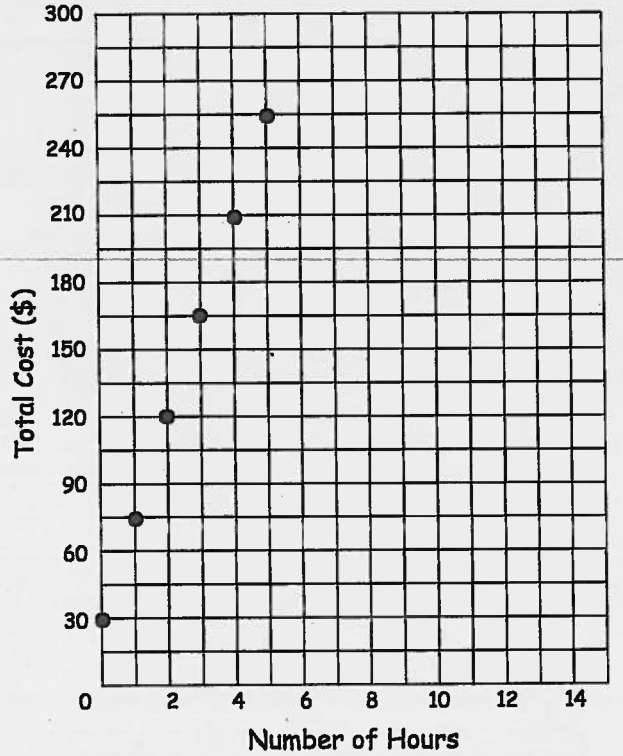
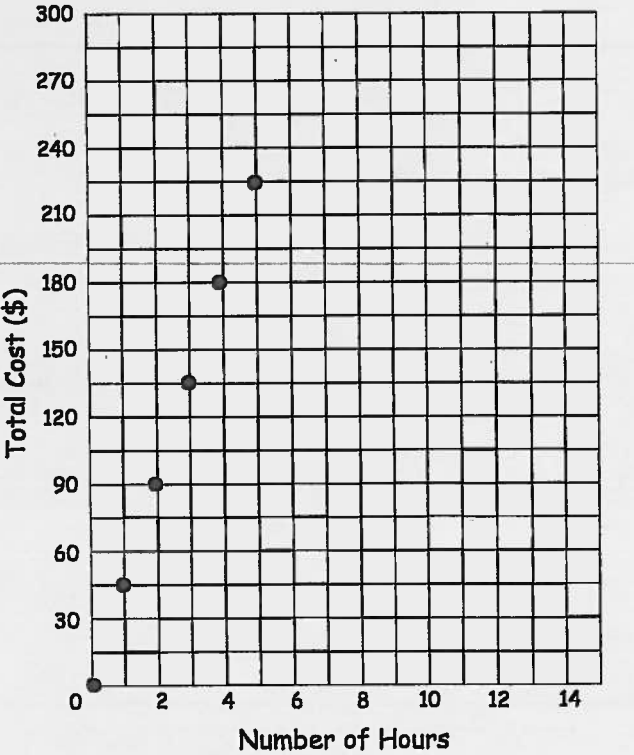


Table 2:



5] Which graph shows a proportional relationship?

6] What makes it a proportional relationship?

Conclusion:

To determine proportionality from a graph,

_____

_____

_____.

Determine which of the following tables represent proportional relationships.

1)

x	y
1	-3
2	-6
3	-9
4	-12
5	-15

8)

x	y
-4	-8
-2	-4
0	0
2	4
4	8

9)

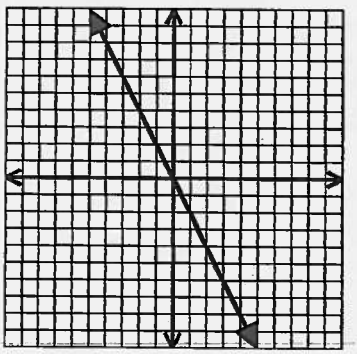
x	y
-1	-6
0	-5
1	-3
2	0
3	4

10)

x	y
-1	-1.5
1	1.5
3	4.5
5	7.5
7	10.5

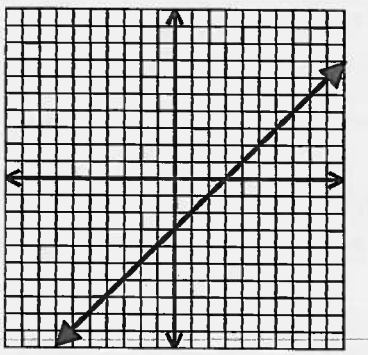
Determine which of the following graphs represent proportional relationships. Circle the appropriate response.

11.



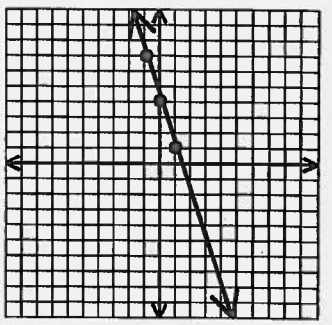
Proportional non-proportional

12.



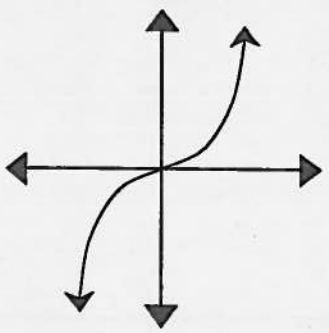
Proportional non-proportional

13.



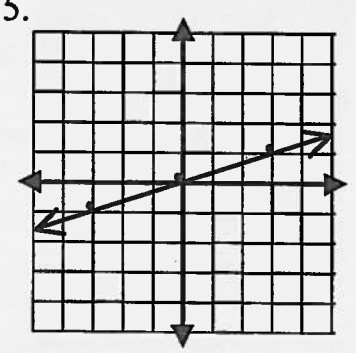
Proportional non-proportional

14.



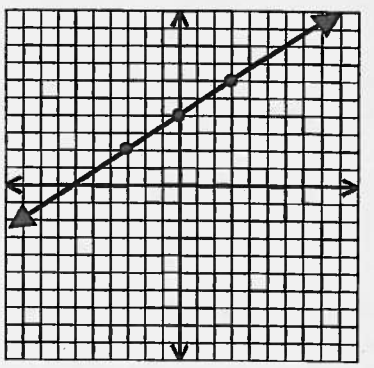
Proportional non-proportional

15.



Proportional non-proportional

16.



Proportional non-proportional

17. Is the following relationship proportional? Explain.

Number of Movie Tickets (x)	Total Cost of Tickets (y)	$\frac{y}{x}$
1	-6	
2	-12	
3	-18	
4	-24	

18. How is a proportional relationship different from a non-proportional relationship?