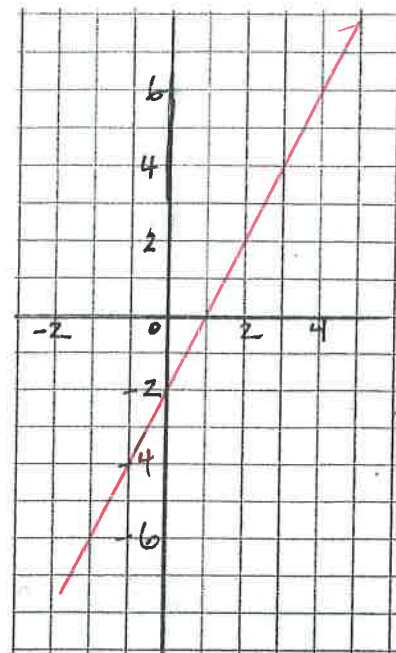MOVING STRAIGHT AHEAD STUDY GUIDE

1. Use the graph at the right.

   a. What is the slope of the line?

   b. Write the equation of the line.

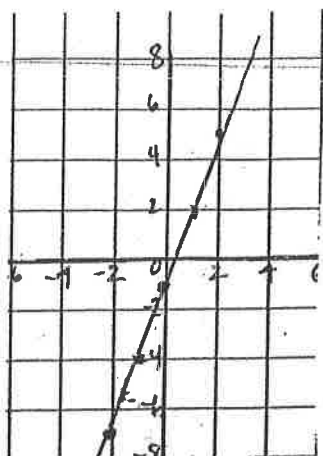2. Does the table show a linear relationship?

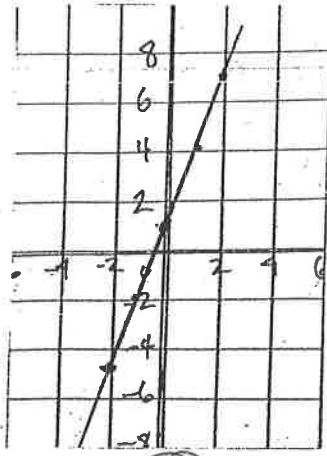   _____ YES, then write an equation:

   _____NO, then explain why not

Kilometers	0	2	5	11	13
Dollars	4	8	14	25	29

3. Match a table, graph and equation.

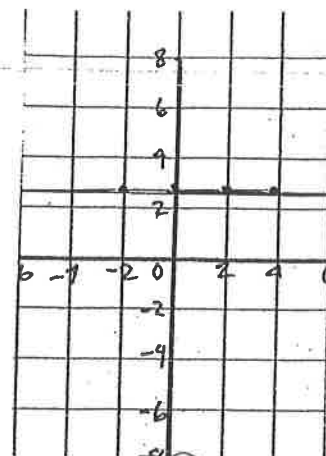| These match:	These match:	These match:	These match:
Table: _____	Table: _____	Table: _____	Table: _____
Graph: _____	Graph: _____	Graph: _____	Graph: _____
Equation: _____	Equation: _____	Equation: _____	Equation: _____

A

B
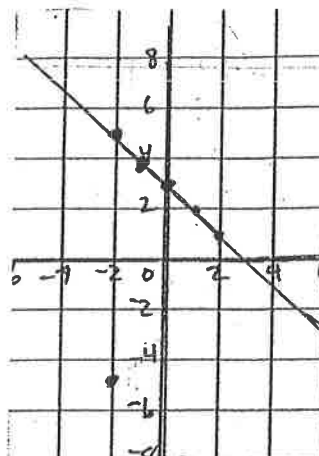
C

D

E.

x	y
-2	-5
-1	-2
0	1
1	4
2	7

F.

x	y
-2	2.5
-1	2.5
0	2.5
1	2.5
2	2.5

G.

x	y
-2	-7
-1	-4
0	-1
1	2
2	5

H.

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

I. $y = 3x - 1$

J. $y = -x + 3$

K. $y = 2.5$

L. $y = 3x + 1$

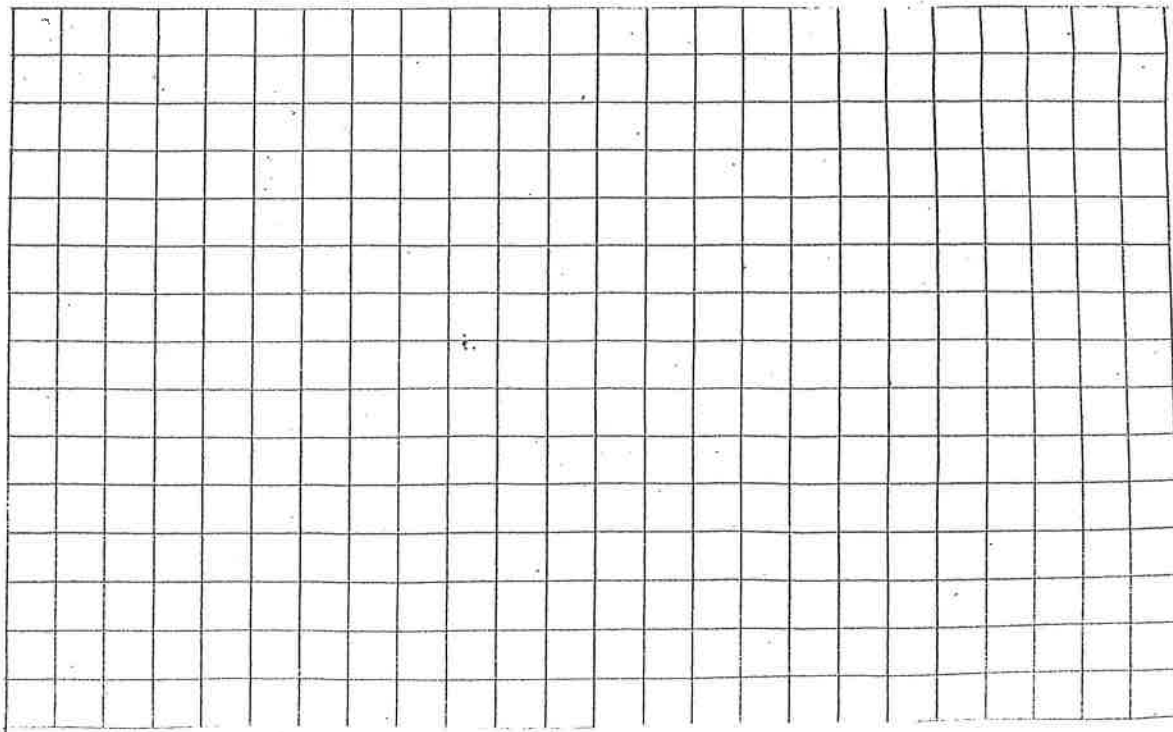4. Sing-Song Music charges the following to download music:

- Members: $50 yearly membership fee plus $2.00 per song
- Non-members: $4.25 per song

a. Fill in the tables below.

MEMBERS	
# songs	cost
0	
10	
20	
30	
40	
50	

NON-MEMBERS	
# songs	cost
0	
10	
20	
30	
40	
50	

b. Graph the relationship between number of songs and cost for both members and non-members on the same graph.

c. Write equations that show the cost for members and nonmembers:

Equation for members: _____

Equation for non-members: _____

d. What is the slope for each line?

Slope of equation for members: _____

Sloe of equation for non-members: _____

e. What information does the slope tell you for each equation?

f. How do you find the slope from a table?

g. How do you find the slope from a graph?

h. How do you find the slope from an equation?

i. What information does the y-intercept of each line represent about the costs?

Y-intercept for members tells me _____

_____

Y-intercept for non-members tells me _____

_____

j. How many songs must be downloaded before the cost is the same for members and non-members?   Explain how you found your answer.