

Consider the following pledge plans. In each situation, y is the amount pledged in dollars by each sponsor, and x is the distance walked in kilometers.

Plan 1	Plan 2	Plan 3
$y = 5x - 3$	$y = -x + 6$	$y = 2$

A) 1. What information does the equation give about the pledge plan? Does the plan make sense?

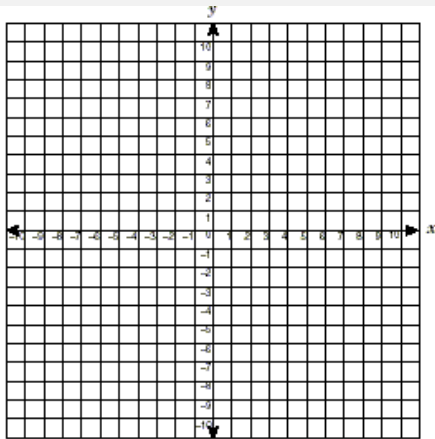
Plan 1	Plan 2	Plan 3

2. Make a table of values from - 5 to 5.

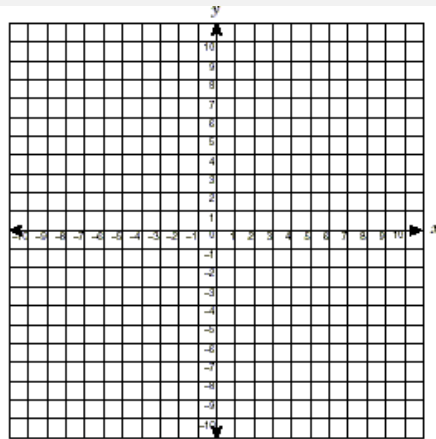
Plan 1		Plan 2		Plan 3	
X	Y	X	Y	X	Y
-5		-5		-5	
-4		-4		-4	
-3		-3		-3	
-2		-2		-2	
-1		-1		-1	
0		0		0	
1		1		1	
2		2		2	
3		3		3	
4		4		4	
5		5		5	

3. Sketch a graph of each plan. Not all points will fit onto your graph and this is ok. What part of each graph is relevant to the situation?

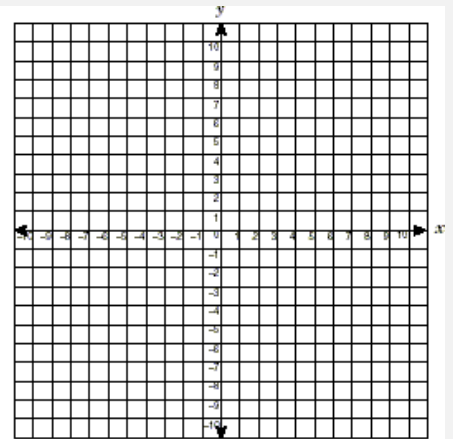
Plan 1



Plan 2



Plan 3



4. What is happening to the y-values as the x-values increase? Explain how you see this in the table, the graph and the equations.

Plan 1

Plan 2

Plan 3

B) 1. Which graph from part A contains the point (2,4)?

2. How do the coordinates (2,4) relate to the equation of the line? How does it relate to the corresponding table data?

3. What information does the coordinate (2,4) tell us about the plan?

C) 1. Which pledge plan's value of x make this statement $8 = 5x - 3$?

2. How would solving for x in $8 = 5x - 3$ help you find the coordinates used to graph the pledge plan?

D) The following three points all lie on the graph of the same pledge plan:

$(-7, 13)$

$(1.2, \blacksquare)$

$(\blacksquare, -4)$

1. Find the missing parts of the coordinates and explain how you found it.

2. Write a question you could answer by finding the missing coordinate.

E) Use a table, graph or equation to answer the following about the pledge plan $y = 5x - 3$.

1. Find the value of y when $x = 7$. Explain how you did it.

2. Find the value of x when $y = 23$. Explain how you did it.