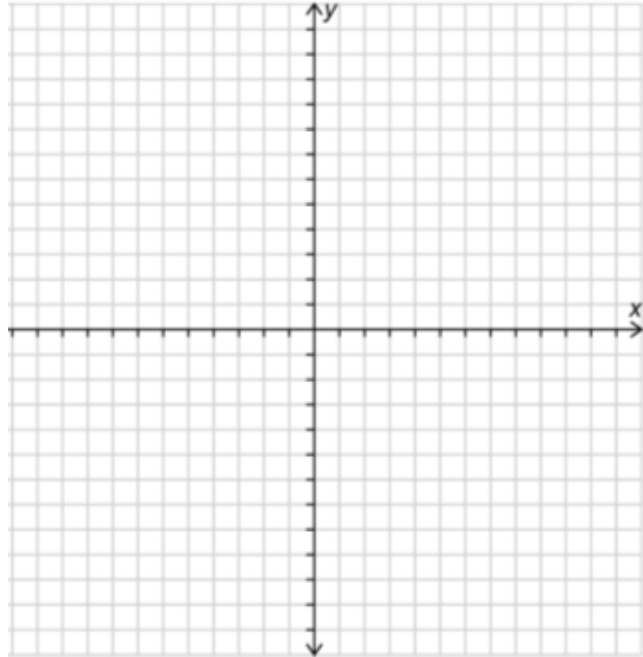


1. Complete the table of values (x is -2 to 2). Graph the equation on the grid provided.
(6 marks)

$$y = 3x - 5$$

x	y



Find the first differences from the table of values.

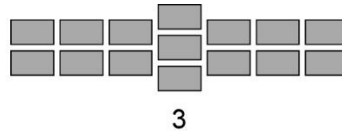
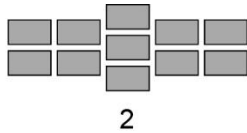
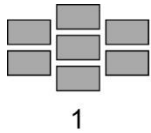
What is the rate of change (slope) for the line? What is the y intercept for the line?

2. a) Determine (i) rate of change (slope), (ii) the y intercept and (iii) then the equation for the pattern represented by the table;

position number, x	number of tiles, y
1	24
2	22
3	20

- b) Determine the number of tiles in the 10th position of this pattern.

3. (a) Complete a table of values that shows the number of tiles in the first 5 positions of this pattern. (4 marks)



x	y

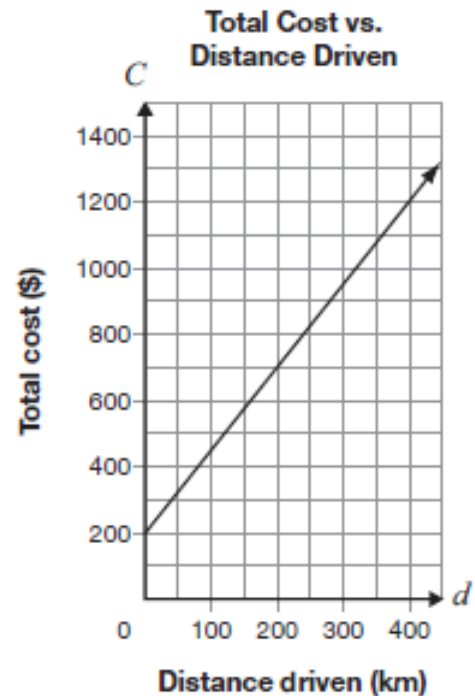
- (b) Write the equation for this pattern.

- (c) How many tiles are there in the 25th (x) position of this pattern?

4. For the given graph, determine the following (include units): (6 marks)

- (a) The cost (\$) per kilometer to rent the limo (slope)
 (b) The initial cost of the limo (y intercept)
 (c) An equation that models the cost of renting the limo
 (d) The cost to drive 750km in the limo

A limousine company charges customers according to the graph shown below.



5. State the slope (rate of change) and y intercept (initial value) for the following linear relationships. (4 marks)

(a) $y = 3x + 5$

(b) $y = \frac{3}{5}x + 7$