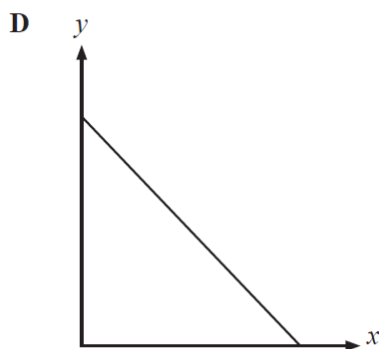
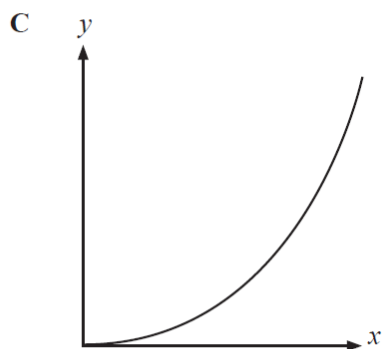
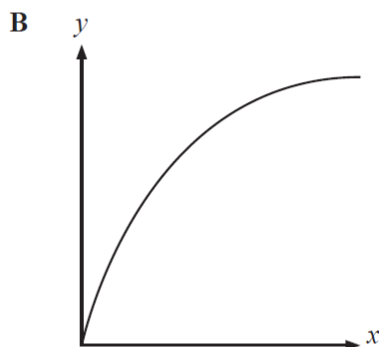
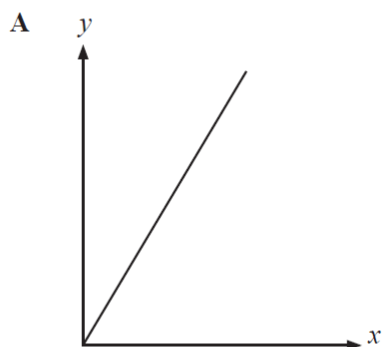


M8 = 7 days to go!

7 y is directly proportional to x^2

Which graph shows this?



Answer _____ [1]

Evaluate

$$1000^{1/3}$$

.....
(1)

9 Over a period of 8 hours, the temperature of a room is given by

$$T = h^2 - 6h + 15$$

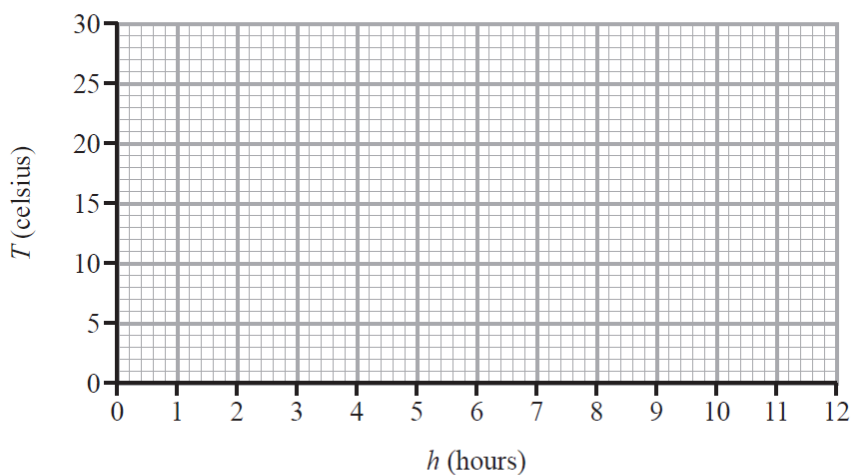
where T is the temperature in degrees Celsius, h hours after the experiment started.

(a) Complete the table below.

h	0	1	2	3	4	5	6	7
T	15	10		6	7		15	22

[1]

(b) Plot the points and draw the graph on the grid below.



[2]

(c) Use your graph to find the times when the temperature in the room was 12 degrees Celsius.

Answer _____, _____ [1]

(d) Use your graph to calculate the gradient of the curve when $h = 6$

Answer _____ [2]

(e) What is the meaning of the value you found in (d)?

Answer _____ [1]