AQA - Graphs – GCSE Mathematics Paper_1

1. June/2021/Paper_1F/No.18

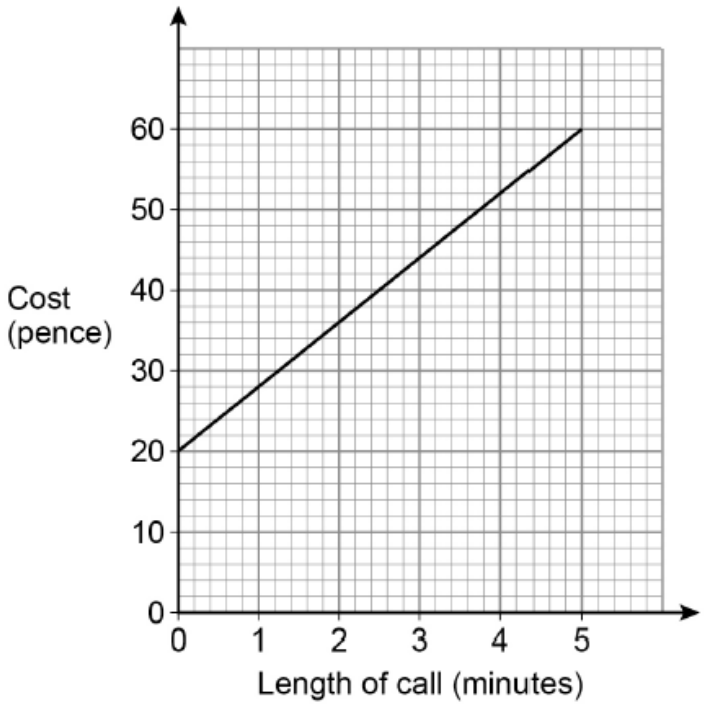
The cost of making a phone call is

a fixed charge

and

a charge per minute.

The costs of phone calls up to 5 minutes are represented by the graph.



(a) Write down the fixed charge.

[1 mark]

Answer _____ pence

(b) Work out the charge per minute.

[2 marks]

Answer _____ pence

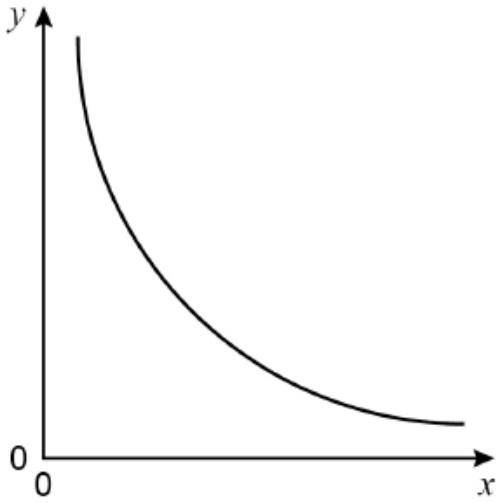
(c) Work out the cost of a phone call lasting 7 minutes.

[2 marks]

Answer _____ pence

2. June/2021/Paper_1F/No.29

Here is a sketch of a graph.



Circle the equation of the graph.

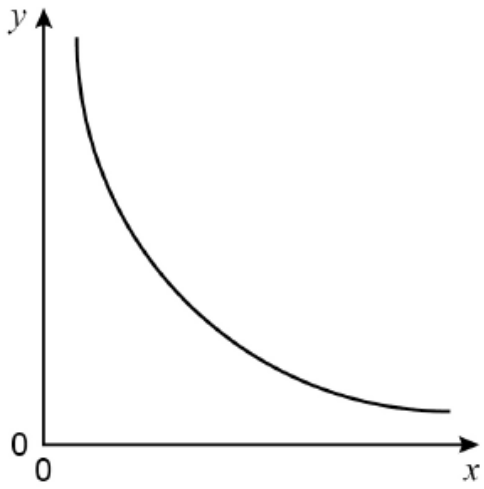
k is a constant.

[1 mark]

$y = kx$ $\quad$ $y = k + x$ $\quad$ $y = k - x$ $\quad$ $y = \frac{k}{x}$

3. June/2021/Paper_1H/No.4

Here is a sketch of a graph.



Circle the equation of the graph.

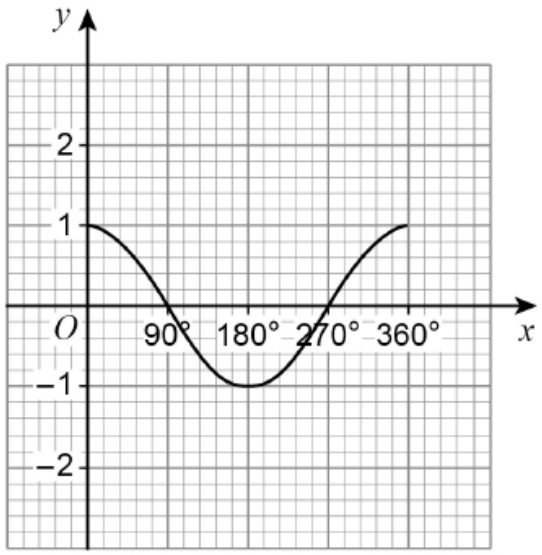
k is a constant.

[1 mark]

$y = kx$ $\quad$ $y = k + x$ $\quad$ $y = k - x$ $\quad$ $y = \frac{k}{x}$

4. June/2021/Paper_1H/No.28

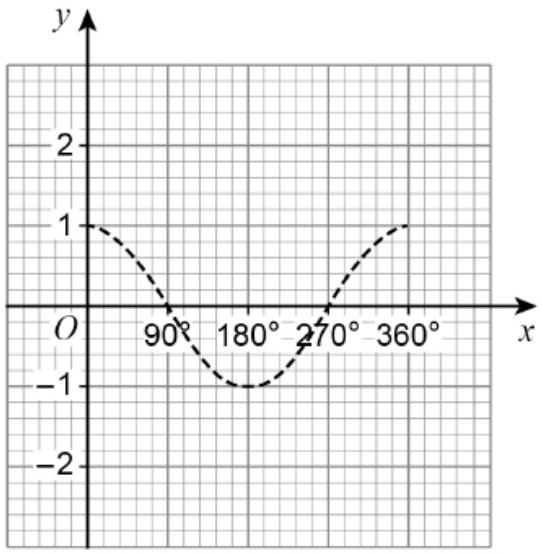
Here is the graph of $y = \cos x$ for $0° \leqslant x \leqslant 360°$



In parts (a) and (b) the graph of $y = \cos x$ is shown as a dashed line.

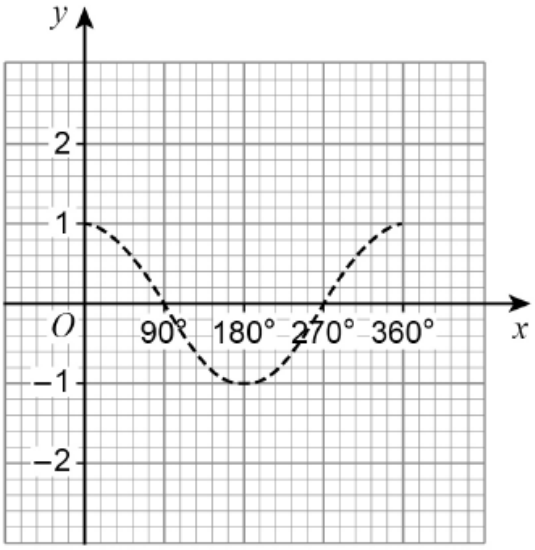
(a) On the grid below, draw the graph of $y = \cos(x - 90°)$ for $0° \leqslant x \leqslant 360°$

[1 mark]



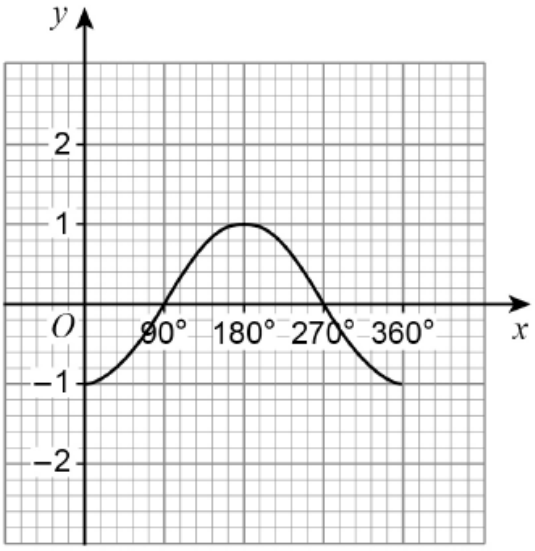
(b) On the grid below, draw the graph of $y = 1 + \cos x$ for $0° \leqslant x \leqslant 360°$

[1 mark]



(c) Rita tries to draw the graph of $y = \cos(-x)$ for $0° \leqslant x \leqslant 360°$

Here is her graph.



Give a reason why Rita's graph is incorrect.

[1 mark]