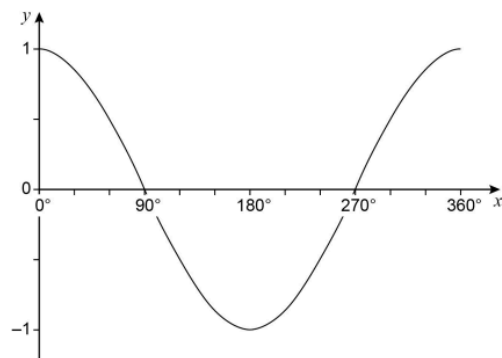


Q1. (2018)

25 Here is a sketch of the graph of $y = \cos x$ for values of x from 0° to 360°



(A)

25 (a) $\cos x = \cos 60^\circ$

Work out the value of x when $90^\circ \leq x \leq 360^\circ$

[1 mark]

Answer _____ degrees

25 (b) $\cos x = -\cos 60^\circ$

Work out the value of x when $180^\circ \leq x \leq 360^\circ$

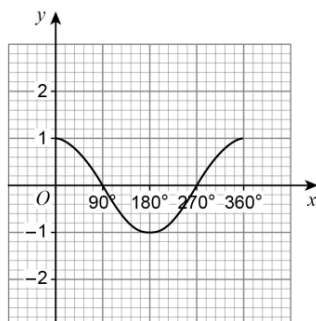
[1 mark]

Answer _____ degrees

(B)

Q2. (2021)

28 Here is the graph of $y = \cos x$ for $0^\circ \leq x \leq 360^\circ$

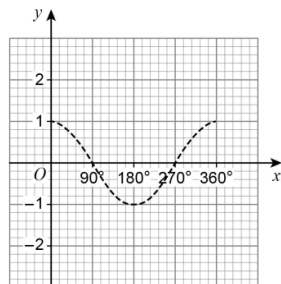


In parts (a) and (b) the graph of $y = \cos x$ is shown as a dashed line.

(A)

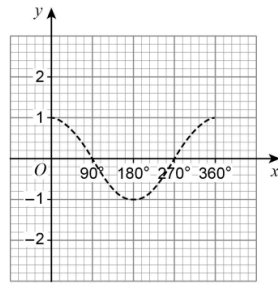
28 (a) On the grid below, draw the graph of $y = \cos(x - 90^\circ)$ for $0^\circ \leq x \leq 360^\circ$

[1 mark]



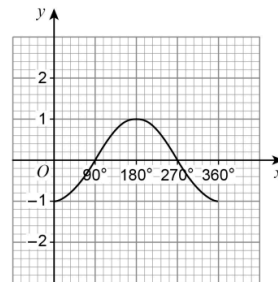
(B)

- 28 (b) On the grid below, draw the graph of $y = 1 + \cos x$ for $0^\circ \leq x \leq 360^\circ$ [1 mark]



(C)

- 28 (c) Rita tries to draw the graph of $y = \cos(-x)$ for $0^\circ \leq x \leq 360^\circ$. Here is her graph.



Give a reason why Rita's graph is incorrect.

[1 mark]

Q3. (2023)

- 25 Show that $\frac{4 \sin 30^\circ - \tan 45^\circ}{2 \cos 30^\circ}$ can be written as $\tan x$, where x is an acute angle.

[4 marks]