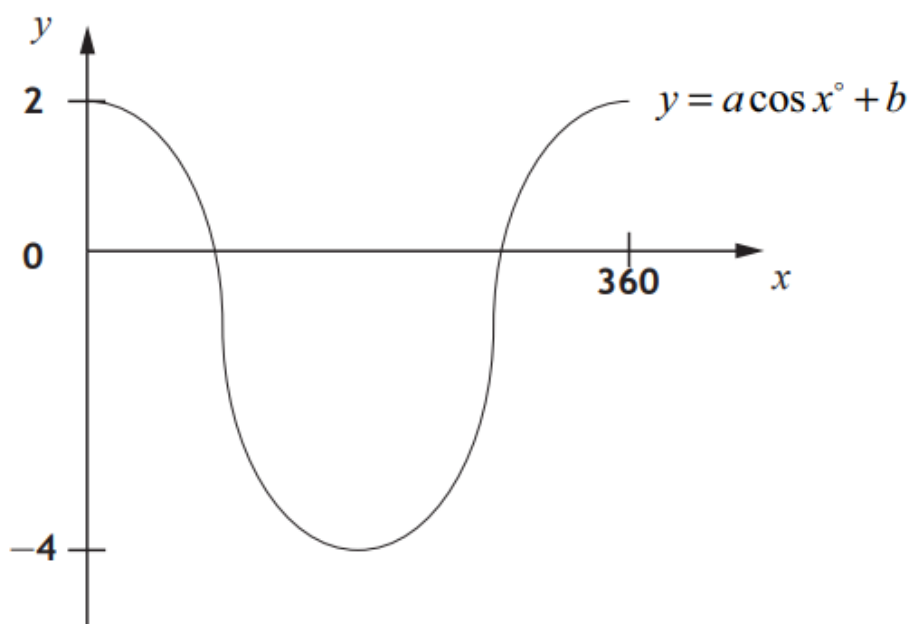




Part of the graph of  $y = a \cos x^\circ + b$  is shown below.



- (a) Explain how you can tell from the graph that  $a = 3$  and  $b = -1$ . 2
- (b) Calculate the  $x$ -coordinates of the points where the graph cuts the  $x$ -axis. 4

Answers:

- (a)  $a = 3$  because  $2 - (-4) = 6$ , which is  $3 \times (1 - (-1))$ .  
 $b = -1$  because the graph of  $y = 3 \cos x$  has been moved down 1.
- (b)  $70.5^\circ$ ,  $289.5^\circ$