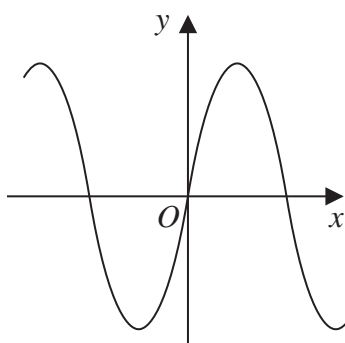
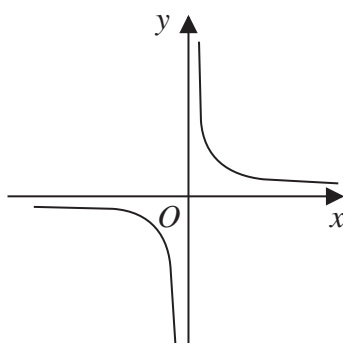


1 Here are nine graphs.

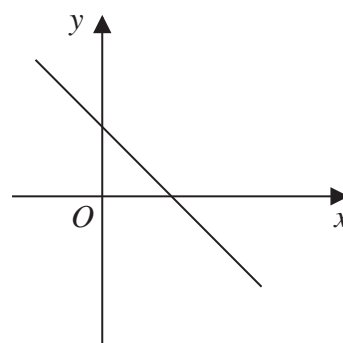
Graph A



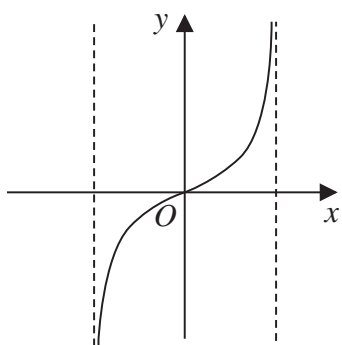
Graph B



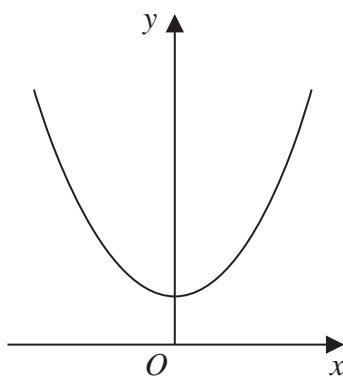
Graph C



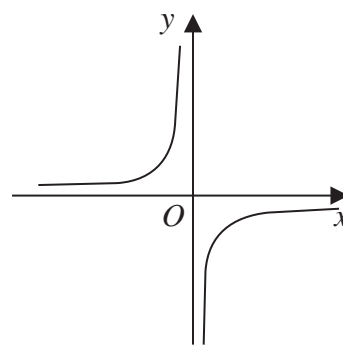
Graph D



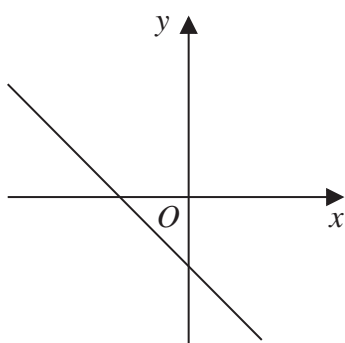
Graph E



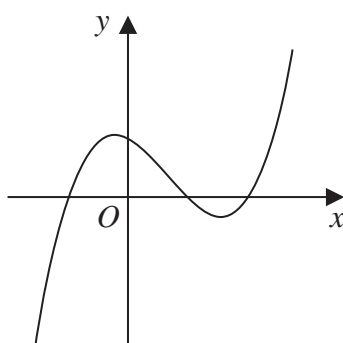
Graph F



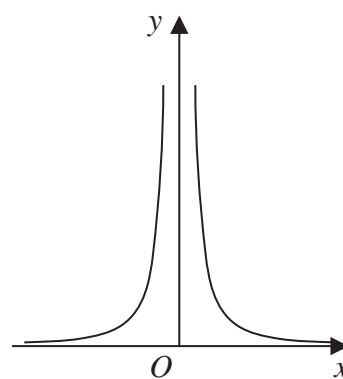
Graph G



Graph H



Graph I



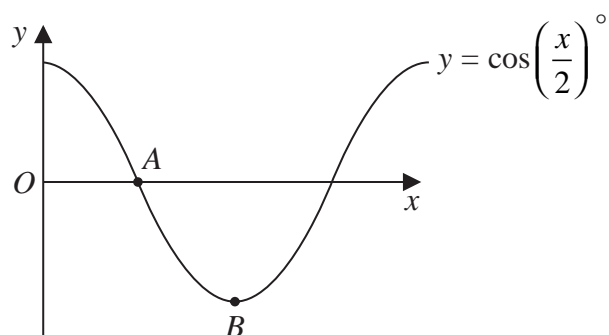
Complete the table below with the letter of the graph that could represent each given equation.
Write each answer on the dotted line.

Equation	Graph
$y = -2x + 3$	C
$y = -\frac{1}{x}$	F
$y = \tan x^\circ$	D
$y = (x + 1)(x - 1)(x - 2)$	H

3

(Total for Question 1 is 3 marks)

- 2 The diagram shows a sketch of the graph of $y = \cos\left(\frac{x}{2}\right)^\circ$



- (i) Find the coordinates of the point A

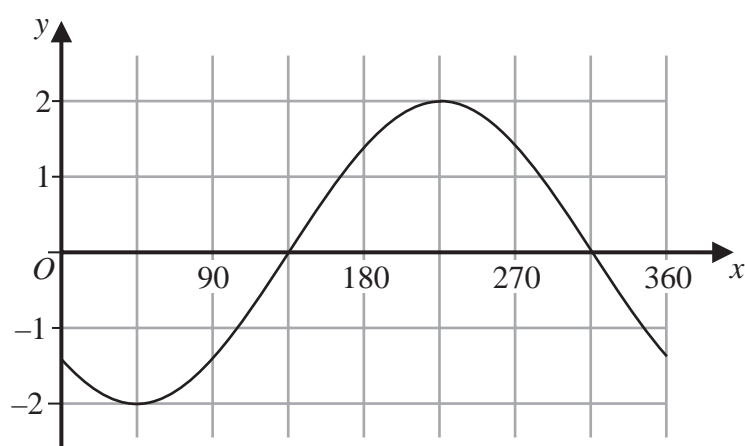
(180 , 0)
(1)

- (ii) Find the coordinates of the point B

(360 , -1)
(1)

(Total for Question 2 is 2 marks)

3 Here is a sketch of the curve $y = a \cos(x + b)^\circ$ for $0 \leq x \leq 360$



Given that $0 < b < 180$

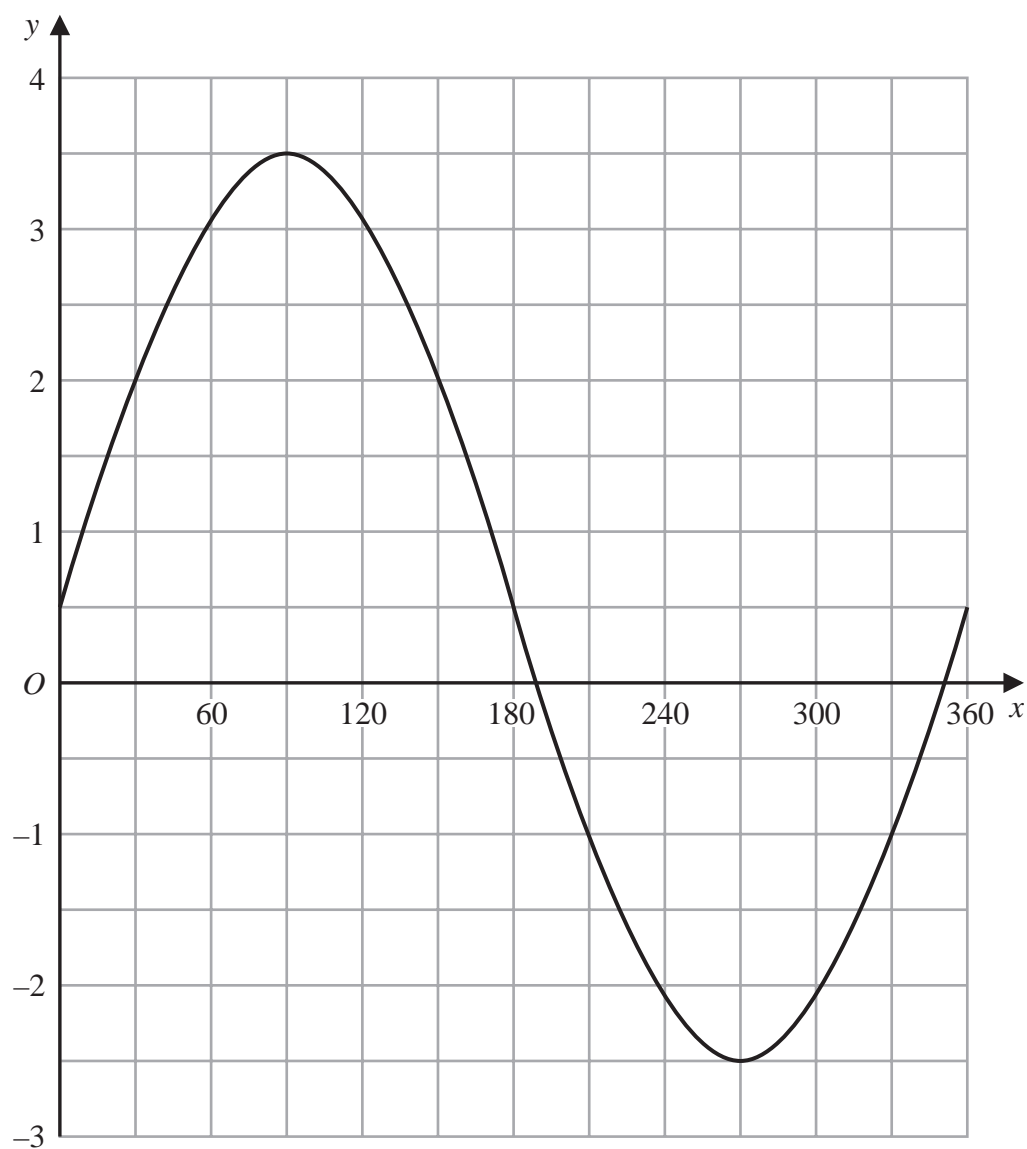
find the value of a and the value of b

$a = \dots\dots\dots 2 \quad (2)$

$b = \dots\dots\dots 135$

(Total for Question 3 is 2 marks)

- 4 The graph of $y = a \sin x^\circ + b$ is drawn on the grid.



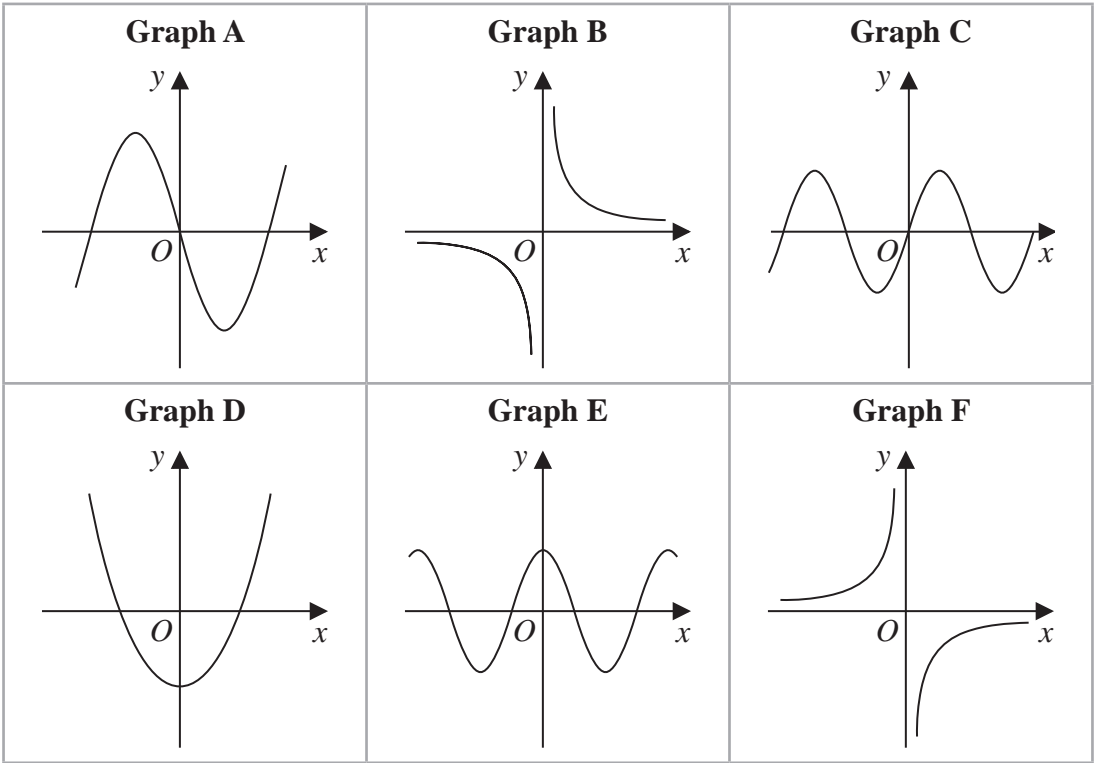
Find the value of a and the value of b

$$a = \text{3} \quad \textcircled{1}$$

$$b = \text{0.5} \quad \textcircled{1}$$

(Total for Question 4 is 2 marks)

5 Here are 6 graphs.

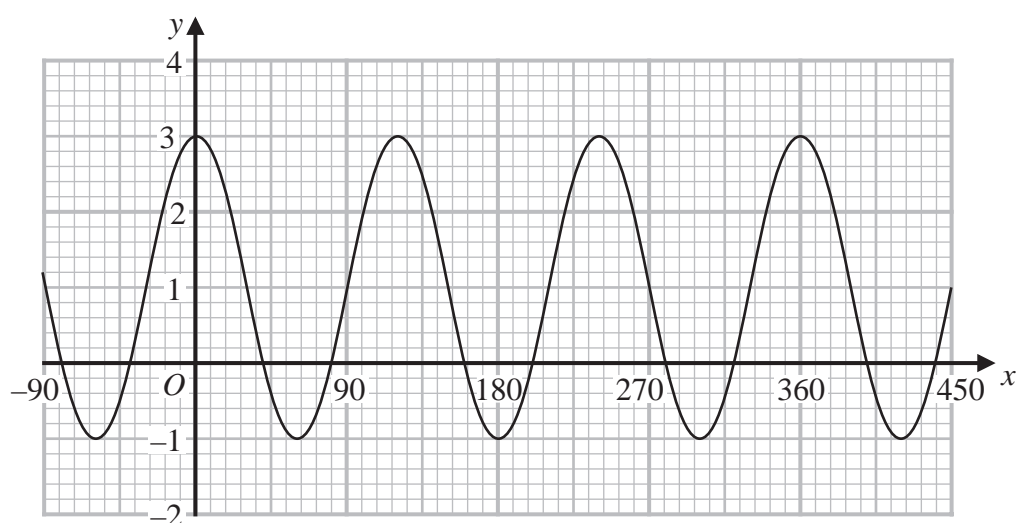


Complete the table below with the letter of the graph that could represent each given equation.

Write your answers on the dotted lines.

Equation	Graph
$y = \sin x$	<div>C</div> <div><div>1</div></div> <div>.....</div>
$y = -\frac{3}{x}$	<div>F</div> <div><div>1</div></div> <div>.....</div>
$y = 4x^3 - 5x$	<div>A</div> <div><div>1</div></div> <div>.....</div>

6 Here is a sketch of the curve with equation $y = a \cos bx^\circ + c$ where $-90 \leq x \leq 450$



Find the value of a , the value of b and the value of c

$a =$ 2 1
 $b =$ 3 1
 $c =$ 1 1

(Total for Question 6 is 3 marks)