

Trig Graphs and Solutions (NON C

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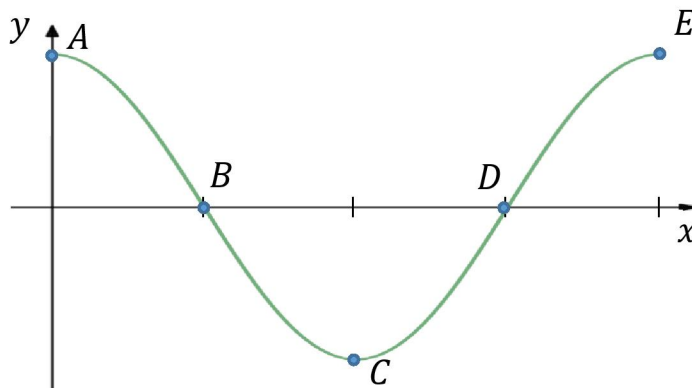
1) Trig Graphs and Solutions (NON CALC): Easier

1) Complete the table of exact trigonometric values. Some have been done for you

x	30°	45°	60°
$\sin x$		$\frac{\sqrt{2}}{2}$	
$\cos x$			$\frac{1}{2}$
$\tan x$	$\frac{\sqrt{3}}{3}$		

(3 marks)

2) Below is a graph of $y = \cos x$ for $0^\circ \leq x \leq 360^\circ$.

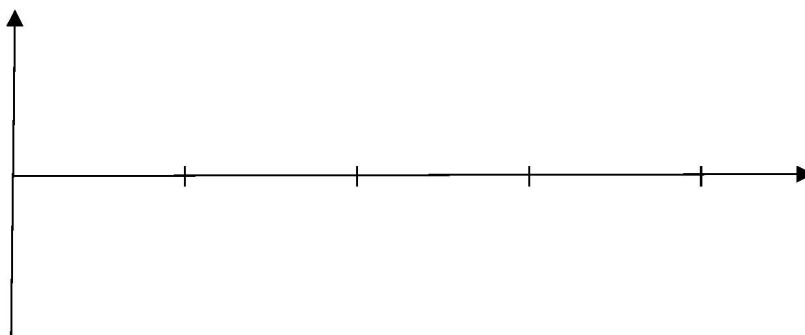


a) Complete the missing coordinates for the points below

$$A(0, \quad), B(\quad, \quad), C(180, \quad), D(\quad, \quad), E(\quad, 1)$$

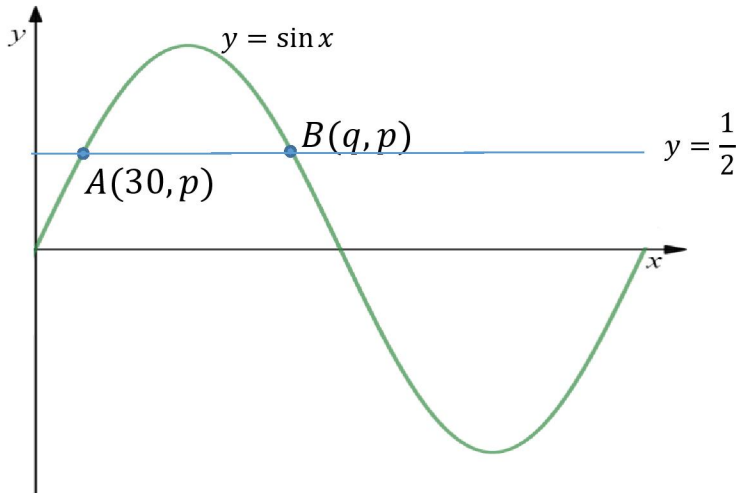
(3 mark)

b) Sketch the graph for $y = \sin x$ for value $0^\circ \leq x \leq 360^\circ$.



1) Trig Graphs and Solutions (NON CALC): Medium

- 3) $y = \sin x$, for $0^\circ \leq x \leq 360^\circ$, is shown on the graph below.
The line $y = \frac{1}{2}$ is also shown on the graph.



- a) Write down the value of p

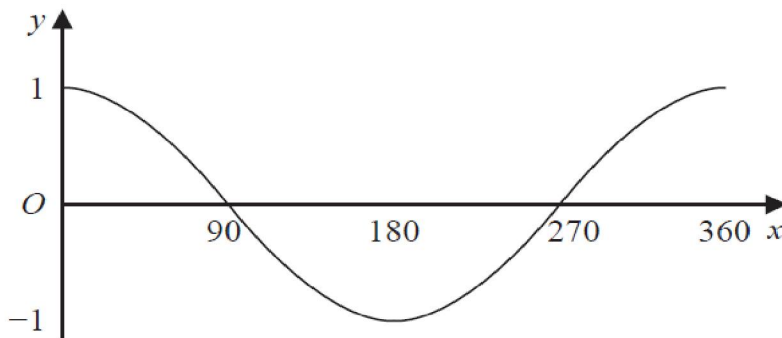
$p = \dots\dots\dots$

- b) Work out the value of q

$q = \dots\dots\dots$

(2 marks)

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



The exact value of $\cos 30^\circ$ is $\frac{\sqrt{3}}{2}$.

- a) Write down the exact value of $\cos 330^\circ$

$\cos 330^\circ = \dots\dots\dots$

(1 mark)

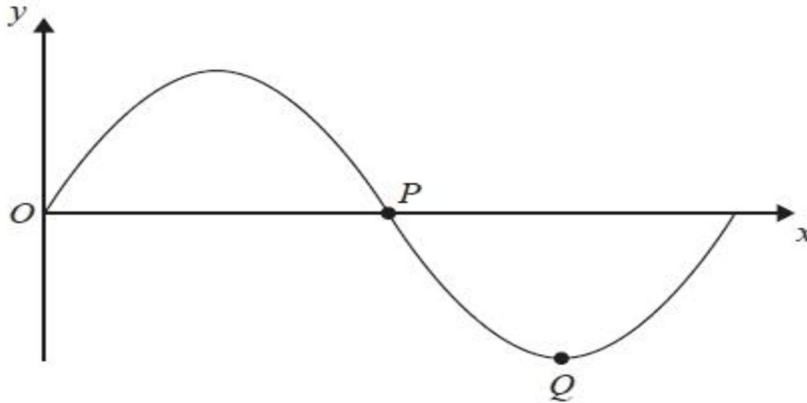
- b) Find two solutions of the equation $\cos x^\circ = -\frac{\sqrt{3}}{2}$

$x = \dots\dots\dots$ or $x = \dots\dots\dots$

(2 marks)

1) Trig Graphs and Solutions (NON CALC): Harder

5) The graph below shows $f(x) = \sin x^\circ$ for values of x between 0 and 360.



a) Write down the coordinates of points P and Q

$P(\dots\dots\dots, \dots\dots\dots)$ $Q(\dots\dots\dots, \dots\dots\dots)$

(2 marks)

b) Given that $\sin 45^\circ = \frac{\sqrt{2}}{2}$, find the exact value of

i) $\sin 135^\circ$

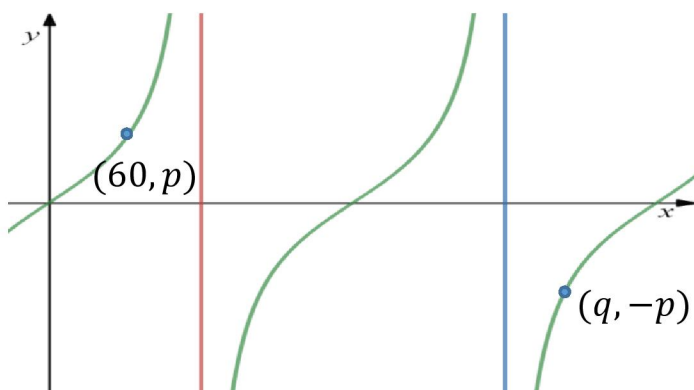
$\sin 135^\circ = \dots\dots\dots$

ii) $\sin 315^\circ$

$\sin 315^\circ = \dots\dots\dots$

(2 marks)

6) The graph below shows $y = \tan x$, for $0^\circ \leq x \leq 360^\circ$ and the coordinates of two points



Work out the values of p and q .

$p = \dots\dots\dots$

$q = \dots\dots\dots$

(2 marks)