

Name:

Exam Style Questions



Trigonometric Graphs

Corbettmaths

Ensure you have: Pencil, pen, ruler, protractor, pair of compasses and eraser

You may use tracing paper if needed

**Guidance**

1. Read each question carefully before you begin answering it.
2. Don't spend too long on one question.
3. Attempt every question.
4. Check your answers seem right.
5. Always show your workings

Revision for this topic

[www.corbettmaths.com/contents](http://www.corbettmaths.com/contents)

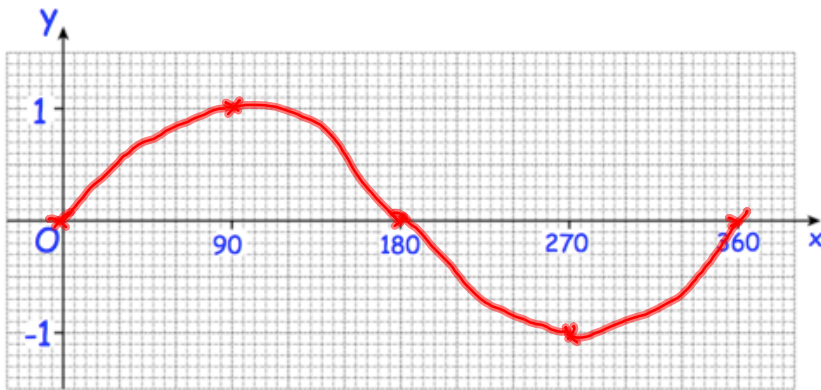
Video 338

Video 339

Video 340

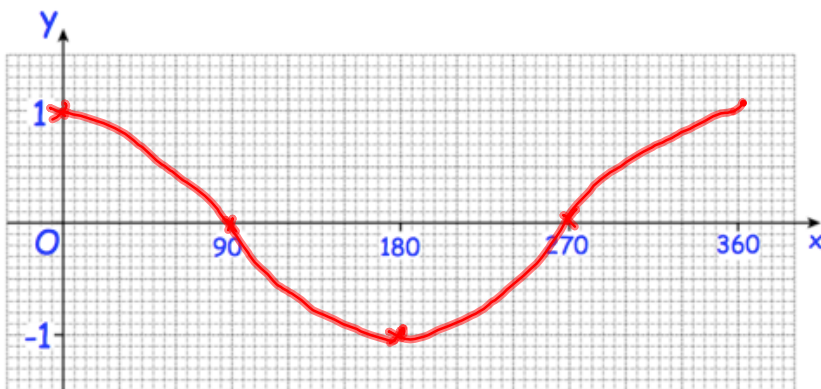


1. Sketch the graph of  $y = \sin x$  for  $0 \leq x \leq 360$ .



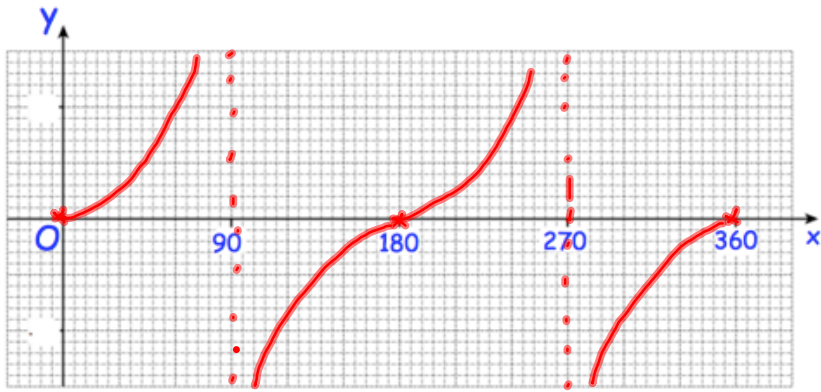
(1)

2. Sketch the graph of  $y = \cos x$  for  $0 \leq x \leq 360$ .



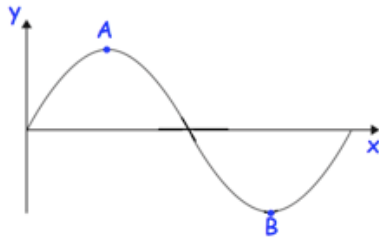
(1)

3. Sketch the graph of  $y = \tan x$  for  $0 \leq x \leq 360$ .



(1)

4. Shown is part of the curve  $y = \sin x$



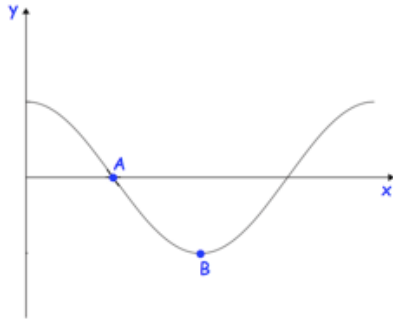
(a) Write down the coordinates of the point A.

(90, 1)  
(....., .....)  
(1)

(b) Write down the coordinates of the point B.

(270, -1)  
(....., .....)  
(1)

5. Shown is part of the curve  $y = \cos x$



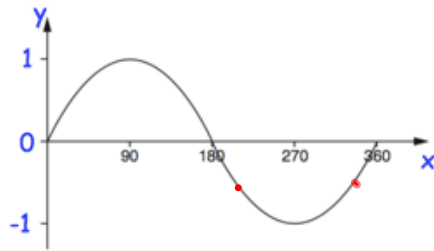
(a) Write down the coordinates of the point A.

(90, 0)  
 (....., .....)  
 (1)

(b) Write down the coordinates of the point B.

(180, -1)  
 (....., .....)  
 (1)

6. Here is the graph of  $y = \sin x$  for  $0 \leq x \leq 360$ .

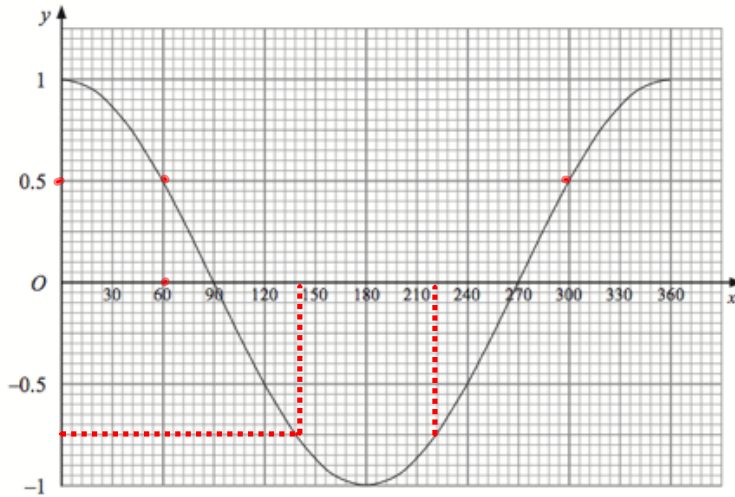


One solution of  $\sin x = -0.5$  is  $x = 210^\circ$

Find another solution of  $\sin x = -0.5$

360 - 30  
 $x = 330$   
 (1)

7. Here is a graph of  $y = \cos x$  for  $0 \leq x \leq 360$ .



(a) Use your graph to solve  $\cos x = 0.5$  for  $0 \leq x \leq 360$ .

$$\underline{60^\circ \text{ e } 300^\circ}$$

(2)

(b) Use your graph to solve  $\cos x = -0.5$  for  $0 \leq x \leq 360$ .

$$\underline{120^\circ \text{ e } 240^\circ}$$

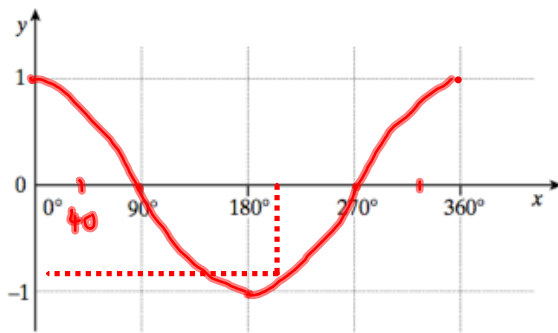
(2)

(c) Use your graph to solve  $\cos x = -0.75$  for  $0 \leq x \leq 360$ .

$$\underline{140^\circ \text{ e } 220^\circ}$$

(2)

8. (a) Sketch the graph of  $y = \cos x$  for  $0 \leq x \leq 360$ .



One solution of the equation  $\cos x = 0.766$  is  $x = 40^\circ$

- (b) Find the other solution of this equation for  $0 \leq x \leq 360$ .

320°  
(2)

- (c) Use your sketch to work out the value of  $\cos 200^\circ$

-0.9  
(1)