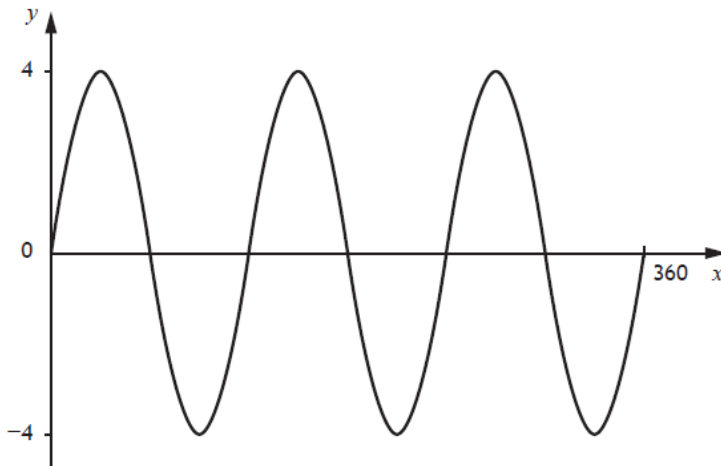


National 5 Mathematics  
Exam Questions by Topic

# Trig Graphs

**2015 N5 Past Paper P1, Q6**

1. Part of the graph of  $y = a\sin bx$  is shown in the diagram.

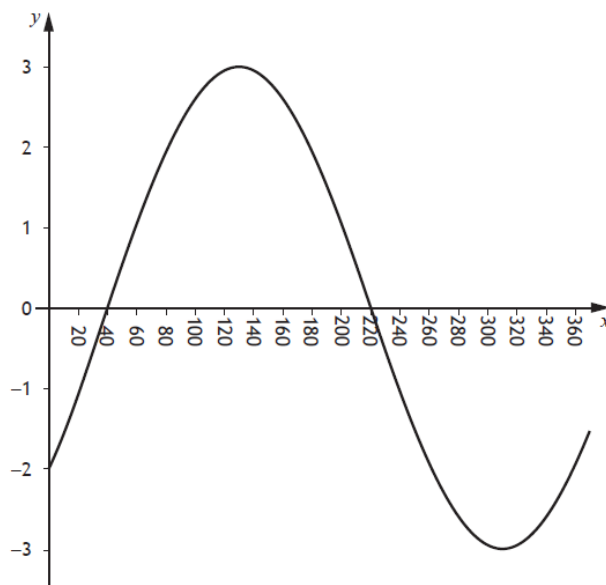


State the values of  $a$  and  $b$ .

(2 marks)

**2014 N5 Past Paper P1, Q10**

2. The graph of  $y = a\sin(x + b)^\circ$ ,  $0 \leq x \leq 360$  is shown below.

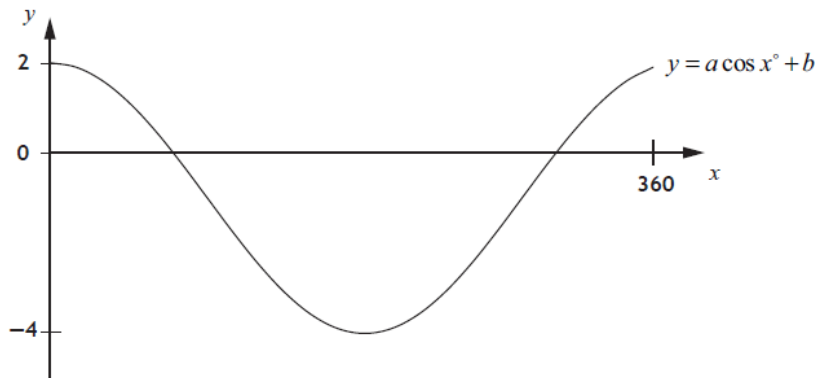


Write down the values of  $a$  and  $b$ .

(2 marks)

**2013 N5 Specimen P2, Q10**

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

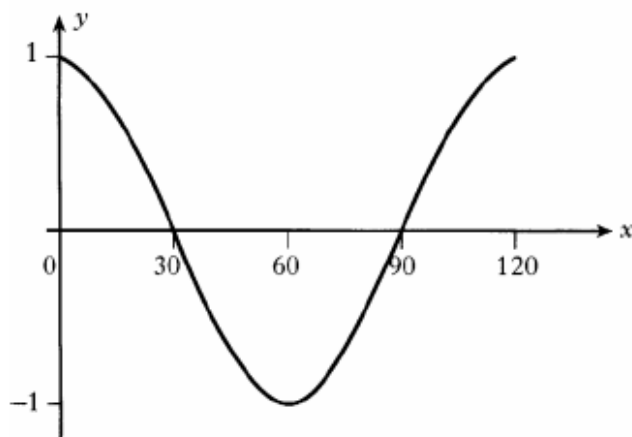


(a) Explain how you can tell from the graph that  $a = 3$  and  $b = -1$  (2 marks)

(b) Calculate the  $x$  – coordinates of the points where the graph cuts the  $x$  – axis. (4 marks)

**N5 Practice Paper A, P1, Q7**

4.



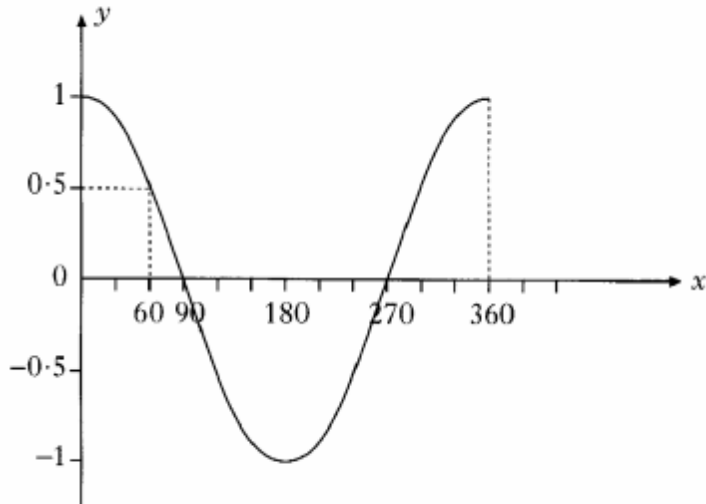
Part of the graph of  $y = a \cos bx$  is shown in the diagram.

State the value of  $b$

(1 mark)

### N5 Practice Paper B, P1, Q8

5.



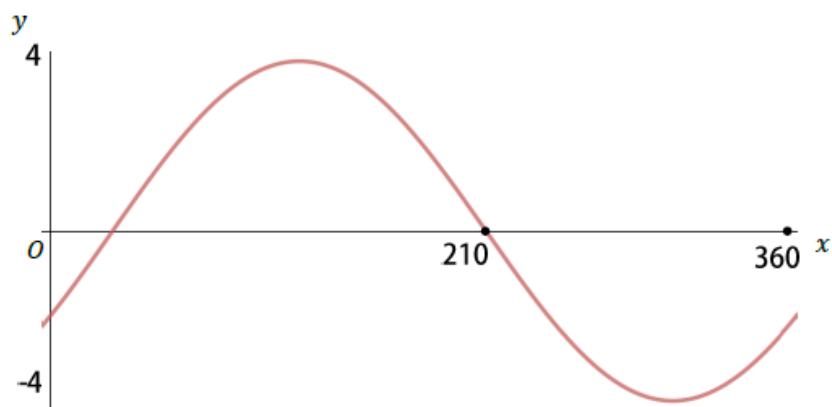
Part of the graph of  $y = a \cos bx$  is shown above.

If  $\cos x^\circ = 0.5$ , state two values for  $x$  for which  $\cos x^\circ = -0.5$ ,  $0 \leq x \leq 360$ .

(2 marks)

### N5 Practice Paper C, P1, Q7

6. Part of the graph of  $y = a \sin(x + b)^\circ$  is shown in the diagram.



State the values of  $a$  and  $b$ .

(2 marks)