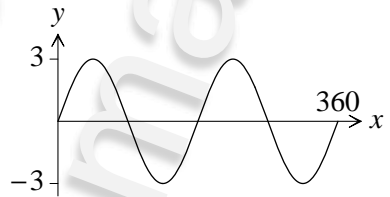


**7.2 Graphs of the form  $y = p \sin qx^\circ$  or  $y = p \cos qx^\circ$**

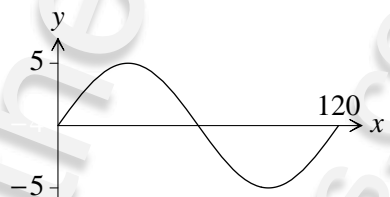
In this exercise you will learn how to:

- work with graphs of the form  $y = p \sin qx^\circ$  or  $y = p \cos qx^\circ$
- find the equation from the graph
- find the points of intersection with the  $x$ -axis
- find the maximum and minimum values and corresponding values of  $x$

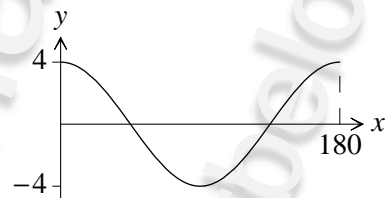
- 1** The diagram shows the curve with equation  $y = p \sin qx^\circ$ .  
Write down the values of  $p$  and  $q$ .



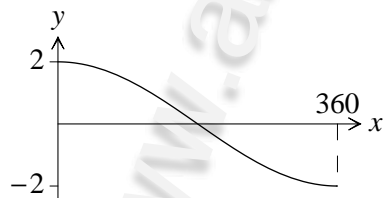
- 2** The diagram shows the curve with equation  $y = a \sin fx^\circ$ .  
Write down the values of  $a$  and  $f$ .



- 3** The diagram shows the curve with equation  $y = p \cos qx^\circ$ .  
Write down the values of  $p$  and  $q$ .



- 4** The diagram shows the curve with equation  $y = a \cos fx^\circ$ .  
Write down the values of  $a$  and  $f$ .



- 5** The diagram shows the curve with equation  $y = 4 \sin 2x^\circ$ . The curve crosses the  $x$ -axis at  $A$  and  $B$ .

(a) Write down the coordinates of  $A$  and  $B$ .

The point  $P$  is a maximum turning point and the point  $Q$  is a minimum turning point.

(b) Write down the coordinates of  $P$  and  $Q$ .

