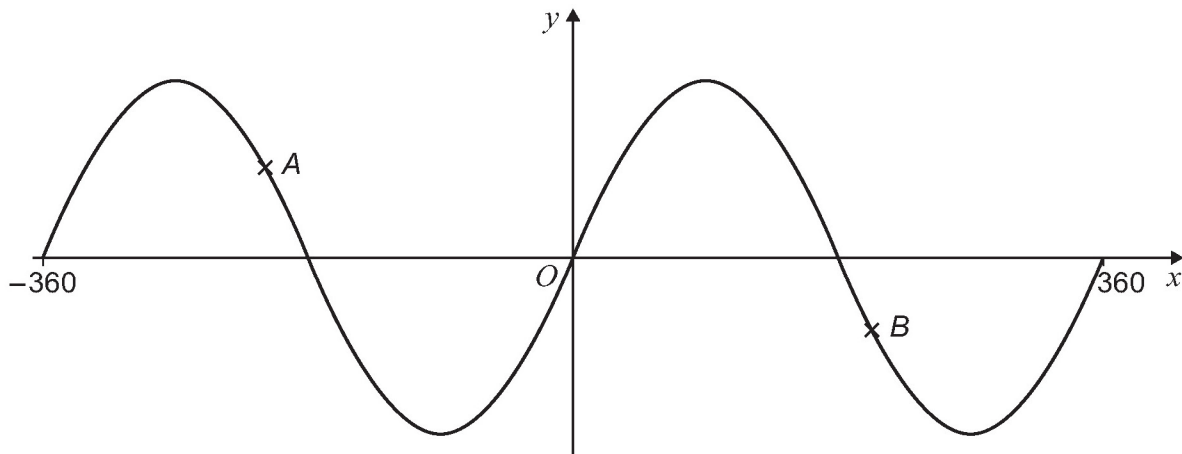


**10** The curve with equation

$$y = \sin x^\circ$$

for  $-360 \leq x \leq 360$  is shown below.



**10 (a)** Point  $A$  on the curve has coordinates  $(a, 0.5)$

**10 (a) (i)** Find the value of  $a$

**[2 marks]**

**10 (a) (ii)** State the value of  $\sin(180^\circ - a^\circ)$

**[1 mark]**

**10 (b)** Point  $B$  on the curve has coordinates  $\left(b, -\frac{3}{7}\right)$

**10 (b) (i)** Find the exact value of  $\sin(b^\circ - 180^\circ)$

**[2 marks]**

**10 (b) (ii)** Find the exact value of  $\cos b^\circ$

**[3 marks]**