## Unit level:

1. Write down the period and amplitude of the graphs of:
   (a) $y = 2\sin x$ (b) $y = \cos 3x$ (c) $y = 4\cos 5x$

2. Sketch graphs for $0 \le x \le 360$ of:
   (a) $y = 2\cos x$ (b) $y = \sin 3x$

3. Solve the equations: (a) $4\sin x - 3 = 0$ (b) $2\tan x - 7 = 0$

Assessment level:

4. Solve the equations: (a) $5\cos x + 4 = 0$ (b) $7\sin x + 1 = -5$

5. An angle, $a°$, can be described by the following statements.
   - a is greater than 0 and less than 360
   - $\sin a°$ is negative
   - $\cos a°$ is positive
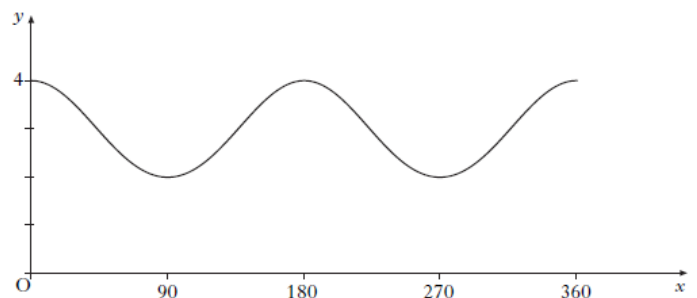   - $\tan a°$ is negative

   Write down a possible value for $a°$.

6. The graph shows $y = \cos(x - a)$
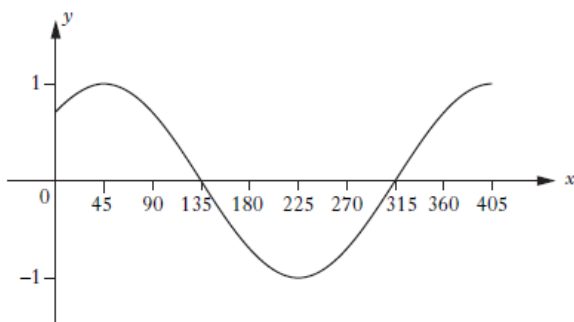
   Write down the value of a

7. The graph shows $y = \cos bx + c$

   Write the values of b and c

8. A Ferris wheel is turning at a steady rate.

   The height, h metres, of one of the cars above the ground at a time t seconds is given by the formula $h = 7 + 5\sin t$.

   Find **TWO** times during the first turn when the car is at a height of 10.8 metres above the ground.