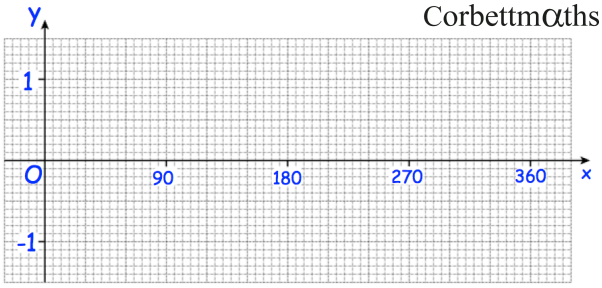
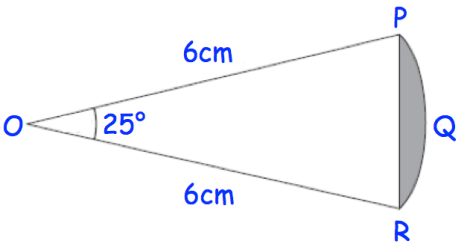
Name: _____ 5-a-day Higher Plus

14th May

Corbettmaths

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





PQR is an arc of a circle centre O with radius 6cm.
PR is a chord of the circle.

Calculate the area of the shaded region.

Find the set of values of x for which
$x^2 - 36 > 0$ **and** $x^2 + 8x - 105 > 0$

Rationalise the denominator of

$$\frac{3+\sqrt{2}}{\sqrt{3}}$$

Solve the simultaneous equations

$y = x^2 + x + 2$
and
$x + 3y = 38$