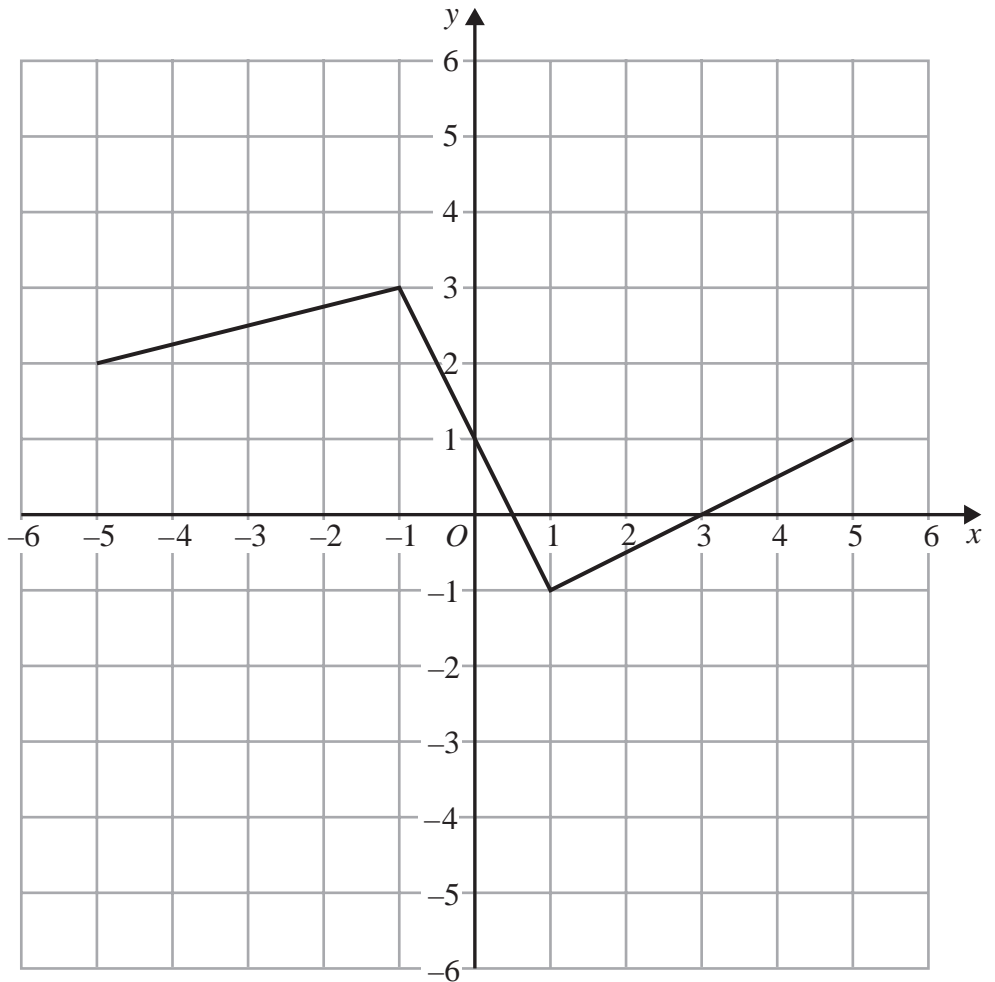


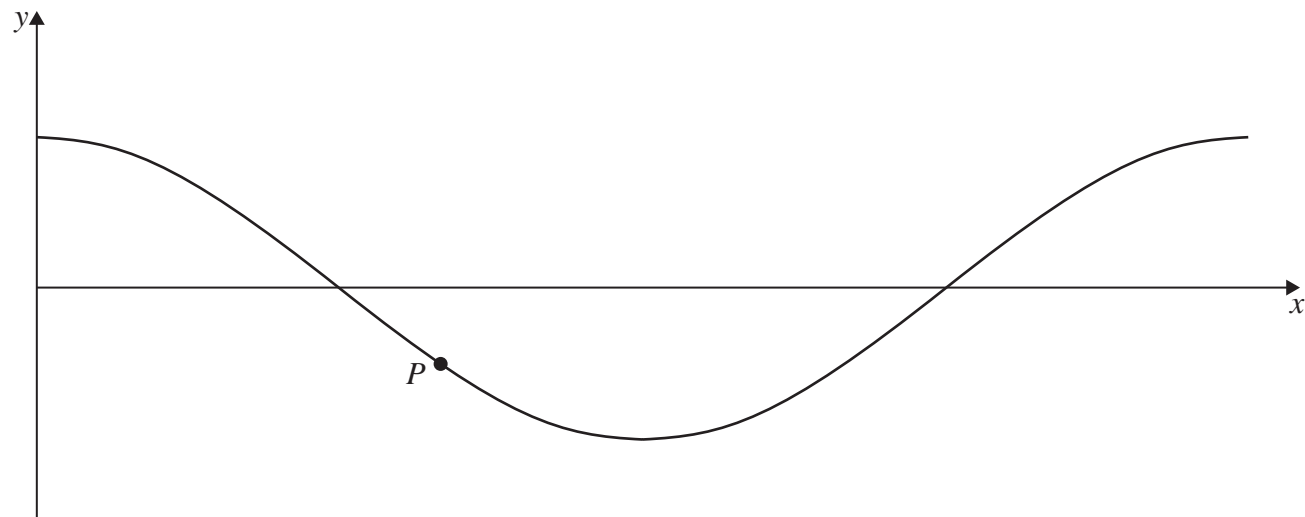
21 Here is the graph of $y = f(x)$



(a) On the grid, draw the graph of $y = -f(x)$

(2)

Here is a sketch of the graph of $y = \cos x^\circ$



Point P , shown on the graph, has a y coordinate of -0.5

The graph of $y = \cos x^\circ$ is transformed to give the graph of $y = \cos(x - 60)^\circ + 2$
The transformation maps point P to point Q .

(b) Work out the exact coordinates of point Q .

(.....,))

(3)