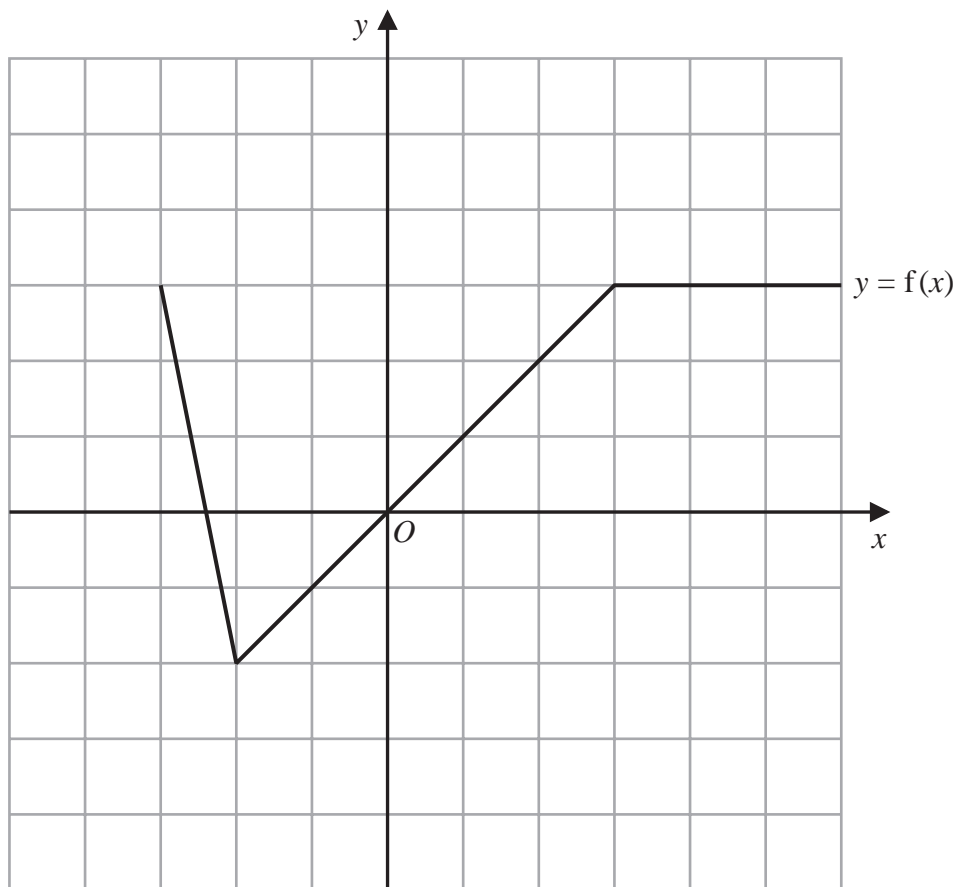


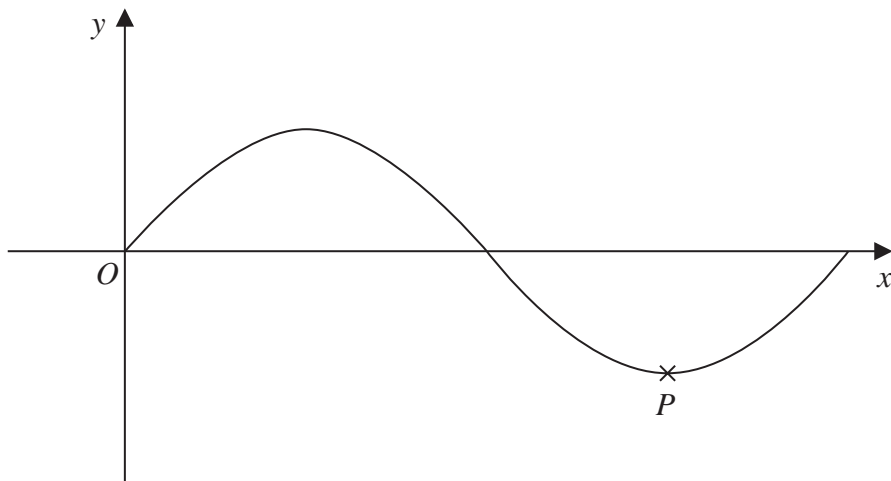
21 Here is the graph of $y = f(x)$



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

(1)

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



The point marked P is a turning point on the graph.

The graph of $y = \sin x^\circ$ is translated to give the graph of $y = \sin(x + 180)^\circ + 4$

Following the translation the point P , shown on the graph above, moves to point R .

(b) Find the coordinates of R .

(..... ,)