



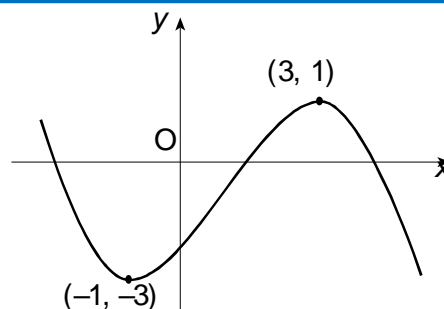
# SPTA

## Higher Homework

### Graphs (A)



1. The diagram shows part of the graph of a function with equation  $y = f(x)$

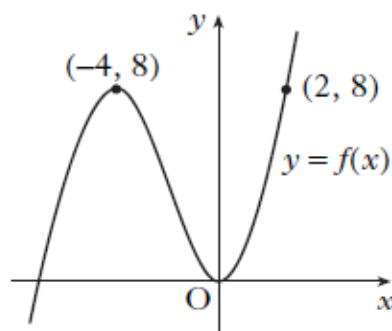


Sketch the graph of  $y = f(3 - x)$

(3)

2. The diagram shows a sketch of the function  $y = f(x)$ .

(a) Copy the diagram and on it sketch the graph of  $y = f(2x)$ .

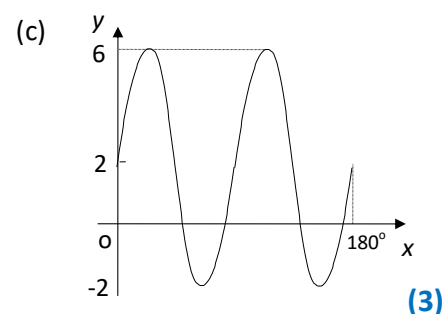
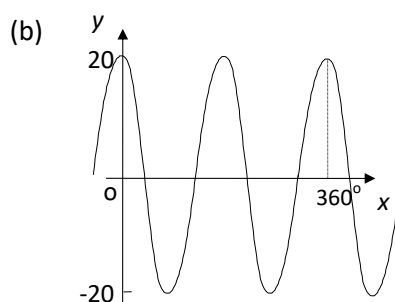
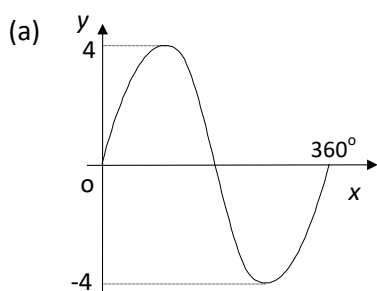


(2)

(b) On a separate diagram sketch the graph of  $y = 1 - f(2x)$

(3)

3. Write down the equation which represents each graph below:



(3)

4. Two functions are defined as  $f(x) = px^2 - 1$  and  $h(x) = \frac{5x+q}{2}$ , where  $p$  and  $q$  are constants.

(a) Given that  $f(2) = h(2) = 7$ , find the values of  $p$  and  $q$

(4)

(b) Find  $h(f(x))$ .

(2)