AQA, OCR, Edexcel

GCSE

GCSE Maths

Graph Transformations, Shifts and Stretches Mixed Questions

Name:

MME
Mathsmadeeasy.co.uk

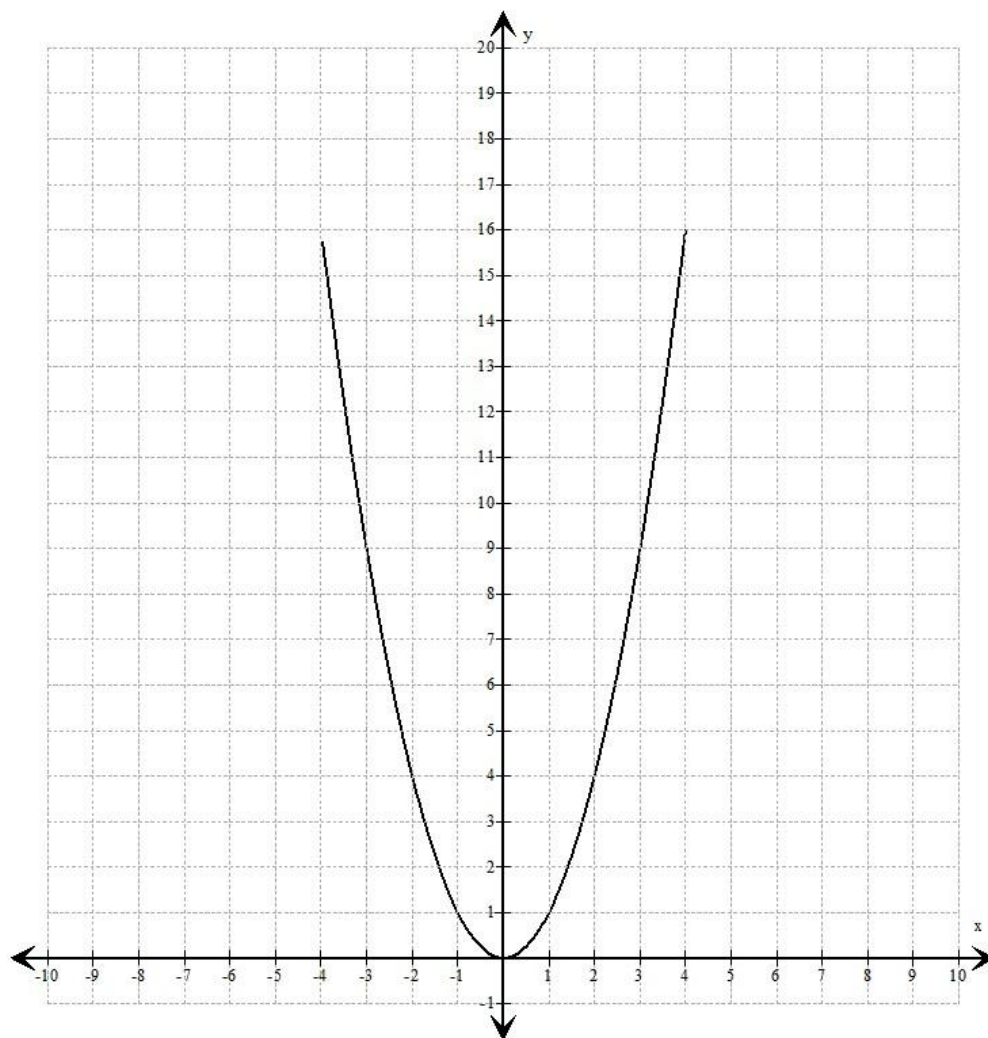Total Marks: /21

Graph Shifts and Stretches (Mixed)

1. Describe the following transformations of $f(x)$:
   a. $y = f(x) - 3$
   b. $y = f(x + 1)$
   c. $y = f(2x)$
   d. $y = 4f(x)$

(8 Marks)

2. The graph of $y = x^2$ is plotted below. Sketch the following transformations of $y = x^2$ on the same set of axes:
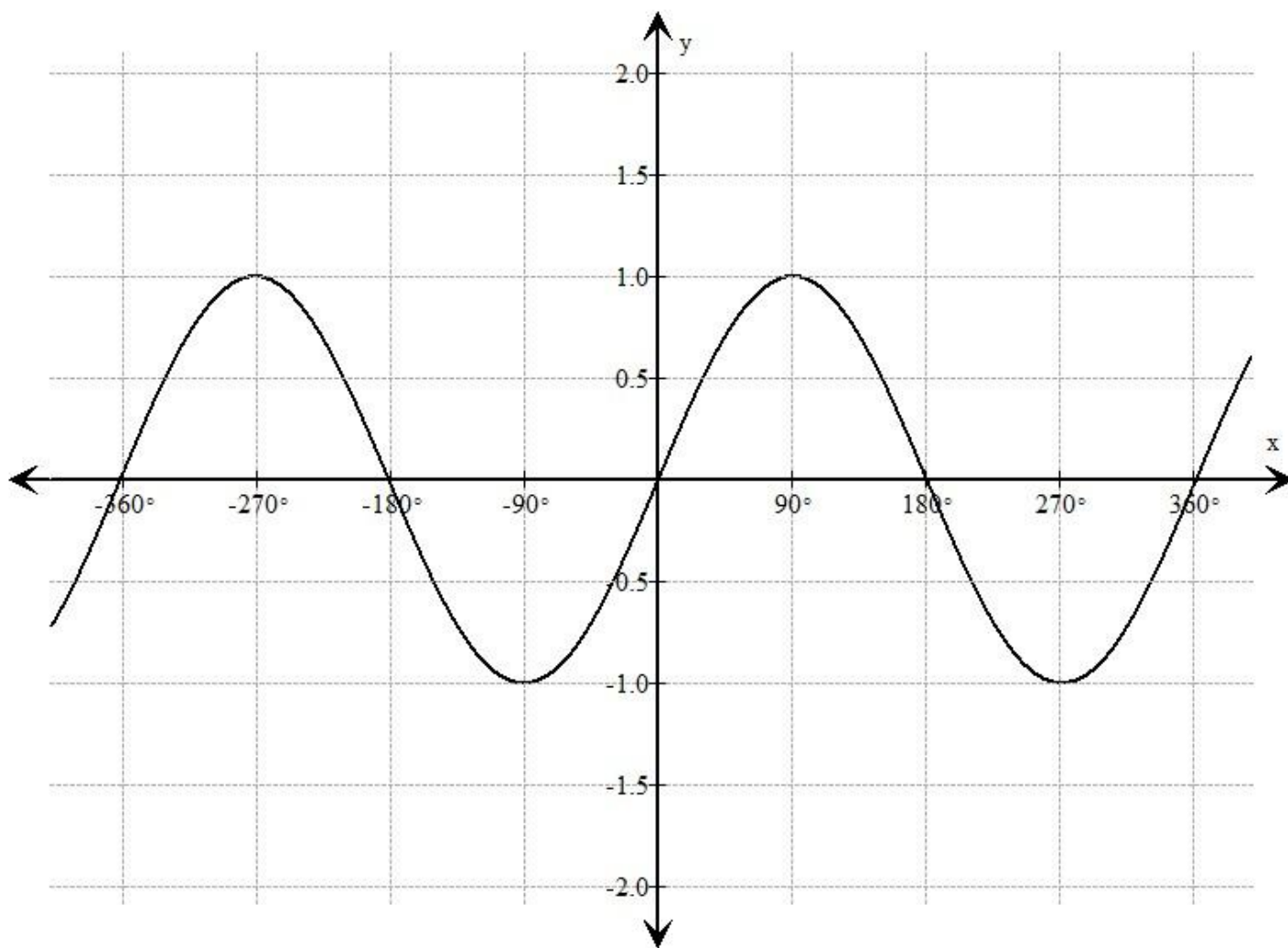   a. $y = \frac{1}{2}x^2$
   b. $y = 2x^2$
   c. $y = (x - 6)^2$

(6 marks)

3. The graph of $y = \sin(x)$ is plotted below. Sketch the following transformations of $y = \sin(x)$ on the same set of axes:
   a. $y = 2\sin(x)$
   b. $y = \sin(4x)$
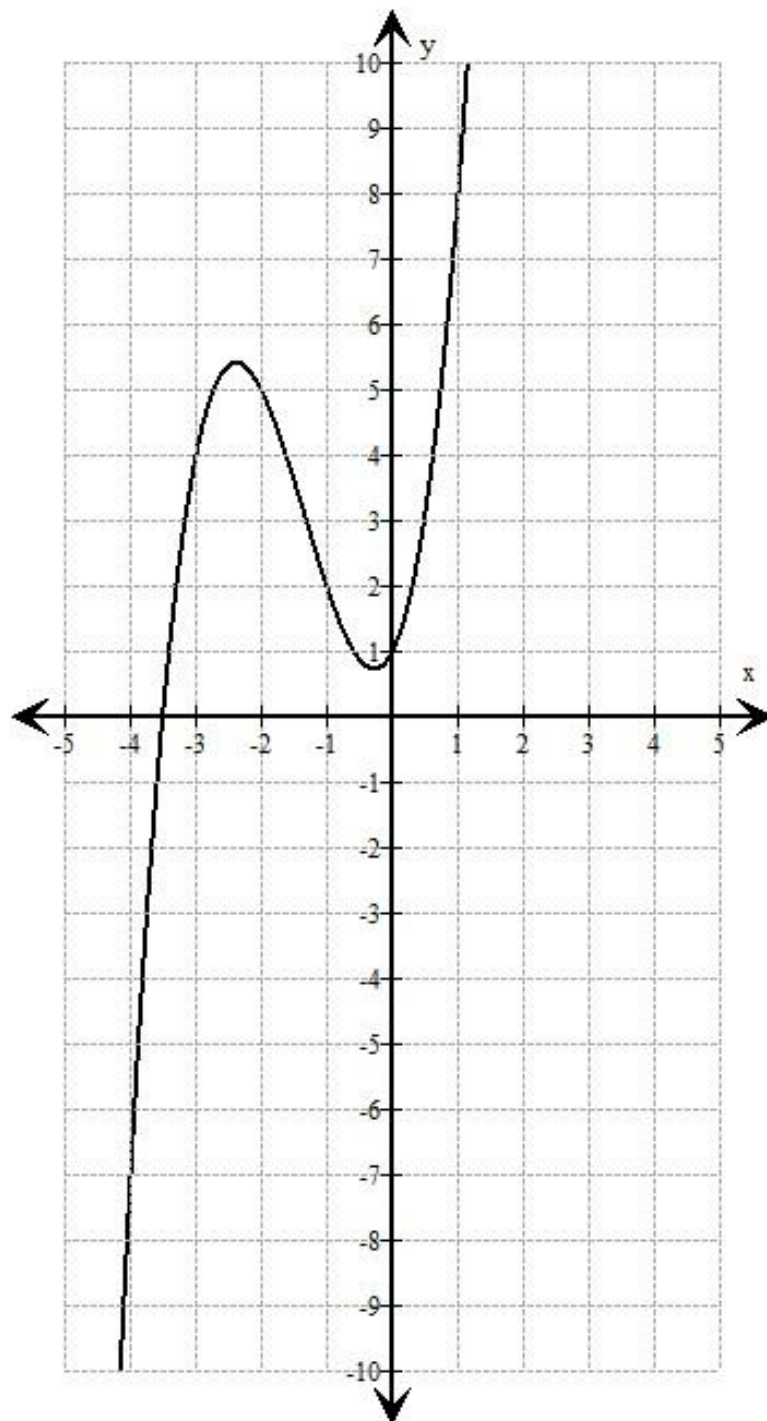   c. $y = \sin(x - 90)$

(3 Marks)

4. The graph of $y = f(x)$ is plotted below. Sketch the following transformations of $f(x)$ on the same set of axes:

   a. $y = f(x - 3)$

   b. $y = f(-x)$

(4 Marks)