## AQA, OCR, Edexcel

## GCSE

## GCSE Maths

Graph Transformations, X Shifts and Stretches Answers

Name:

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## Graph Transformations x-Stretch, x-Shift

1. The graph of $y=\sin (x)$ is plotted below. Sketch the following transformations of $y=\sin (x)$ on the same set of axes.
a. $y=\sin (2 x)$
b. $y=\sin \left(\frac{1}{2} x\right)$
c. $y=\sin (x+90)$

(6 marks)
2. The graph of $y=\mathrm{f}(\mathrm{x})$ is plotted below. Sketch the following transformations of $f(x)$ on the same axes.
a. $y=f(2 x)$
b. $y=f\left(\frac{1}{2} x\right)$
c. $y=f(x-7)$

(6 Marks)
