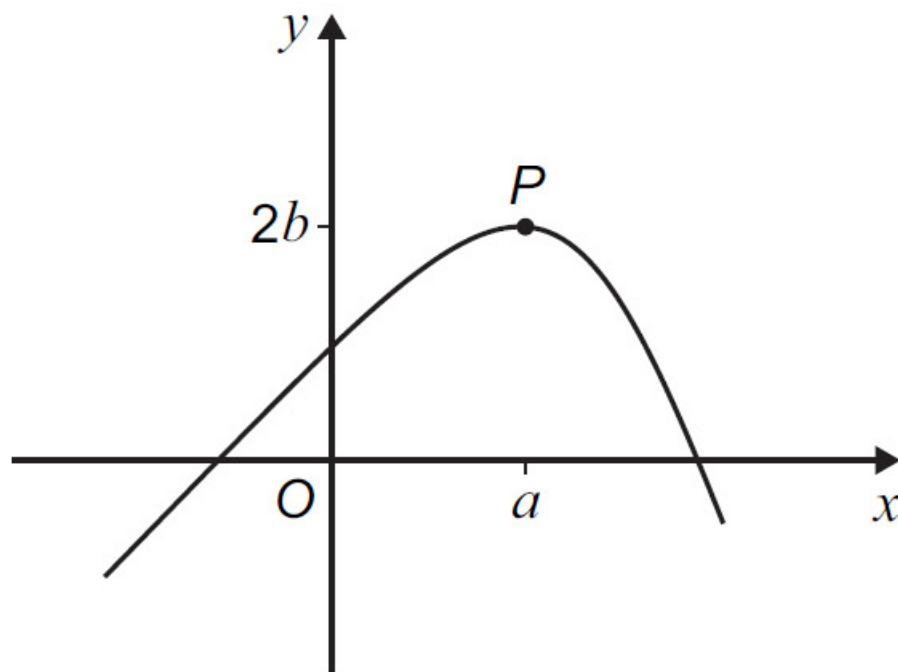


7 The curve C has equation $y = f(x)$

C has a maximum point at P with coordinates $(a, 2b)$ as shown in the diagram below.



7 (a) C is mapped by a single transformation onto curve C_1 with equation $y = f(x + 2)$

State the coordinates of the maximum point on curve C_1

[1 mark]

7 (b) C is mapped by a single transformation onto curve C_2 with equation $y = 4f(x)$

State the coordinates of the maximum point on curve C_2

[1 mark]

7 (c) C is mapped by a stretch in the x -direction onto curve C_3 with equation $y = f(3x)$

State the scale factor of the stretch.

[1 mark]