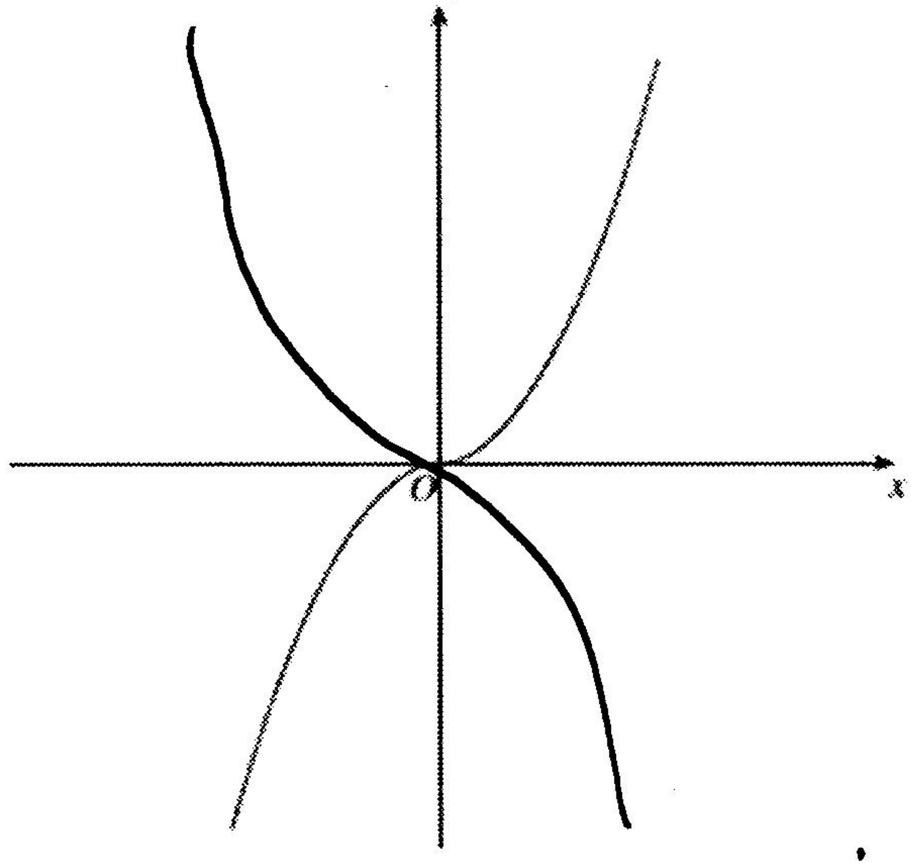
ANSWERS

Transformation of Graphs – Past Paper Questions

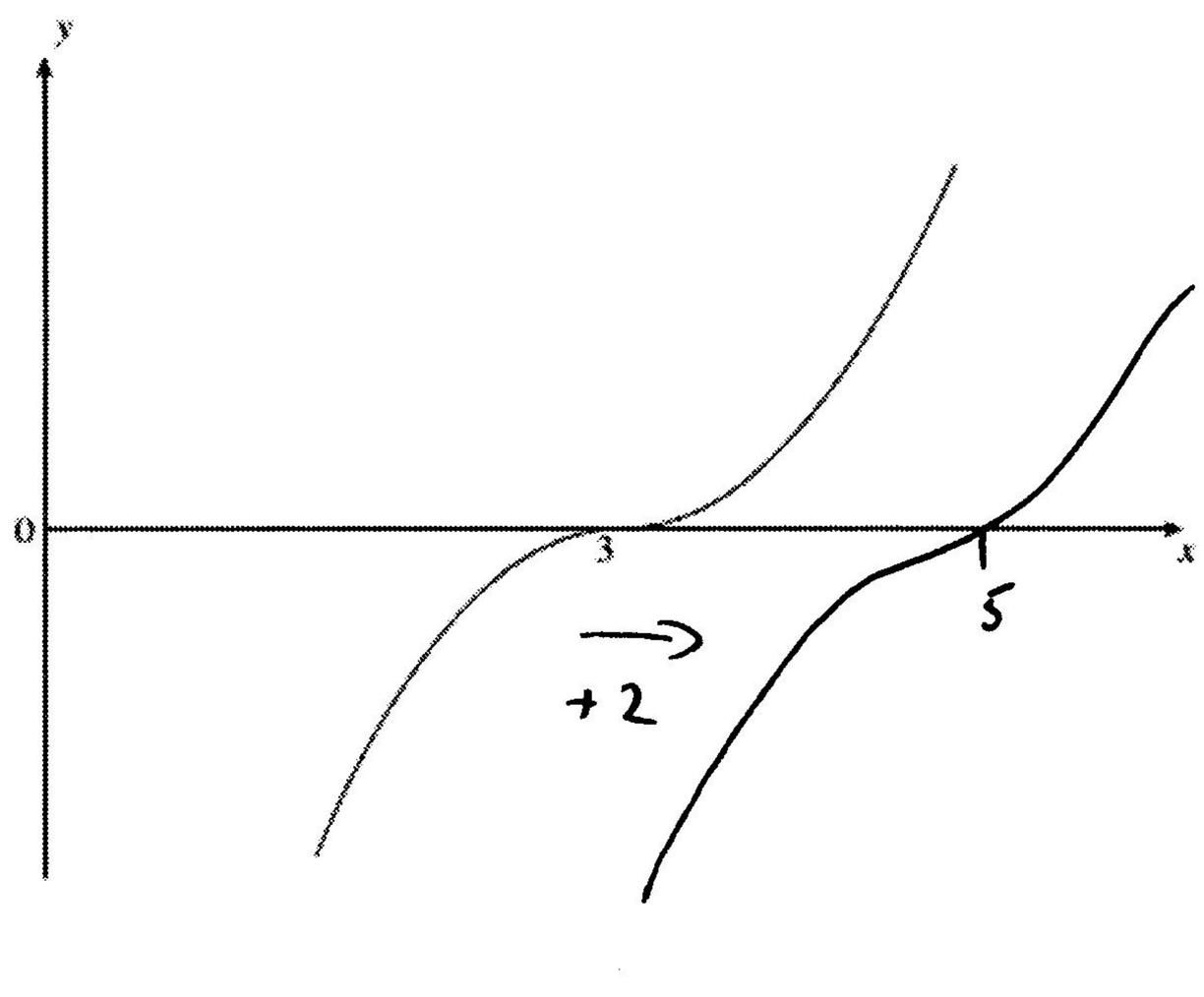
18. *(a)* The diagram shows the sketch of $y = 5x^3$. On the same diagram, sketch the curve $y = -5x^3$. [1]

reflects in x-axis.



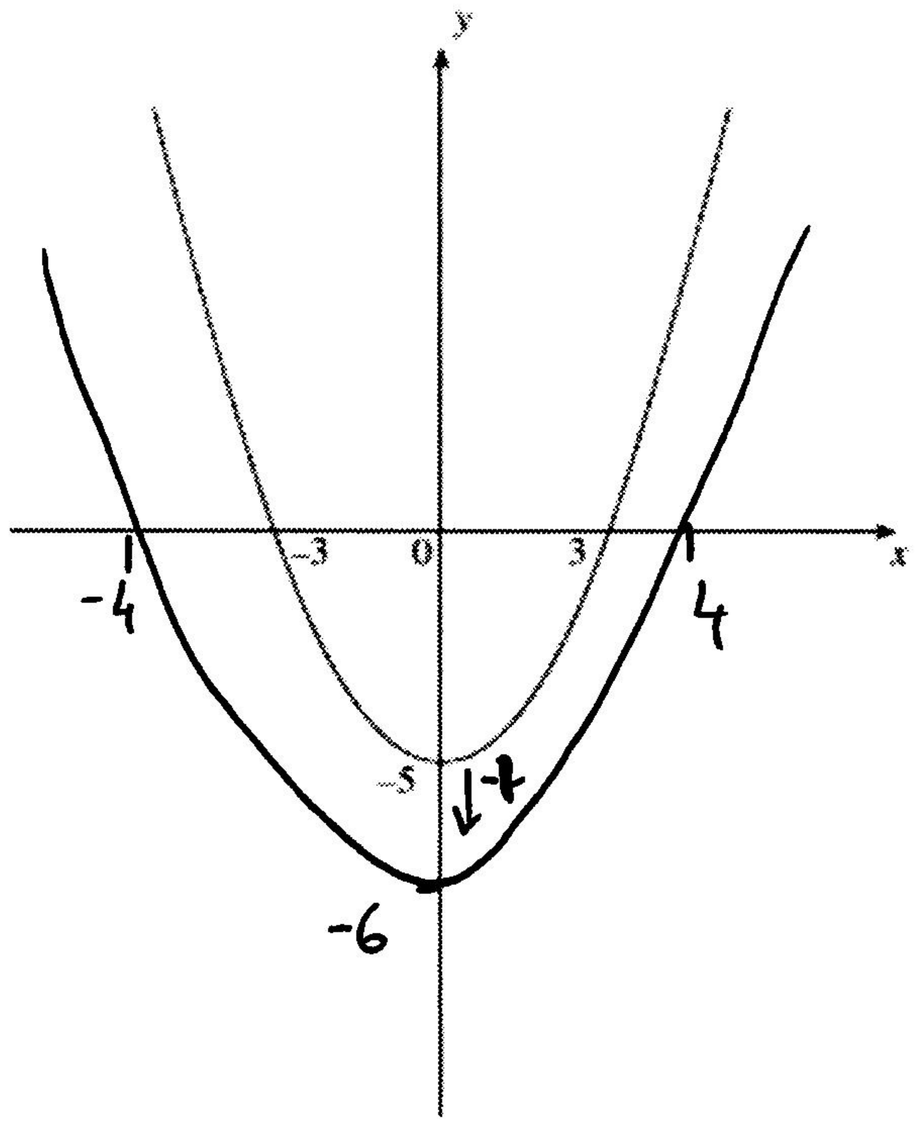
(b) The diagram shows a sketch of $y = f(x)$.
On the same diagram sketch the curve $y = f(x - 2)$.
Mark clearly the coordinates of the point where the curve crosses the x-axis. [2]

inside so do the opposite.



(c) The diagram shows a sketch of $y = f(x)$.
On the same diagram sketch the curve $y = f(x) - 1$.

outside so do as it says.



Write down the minimum value of $f(x) - 1$. = -6

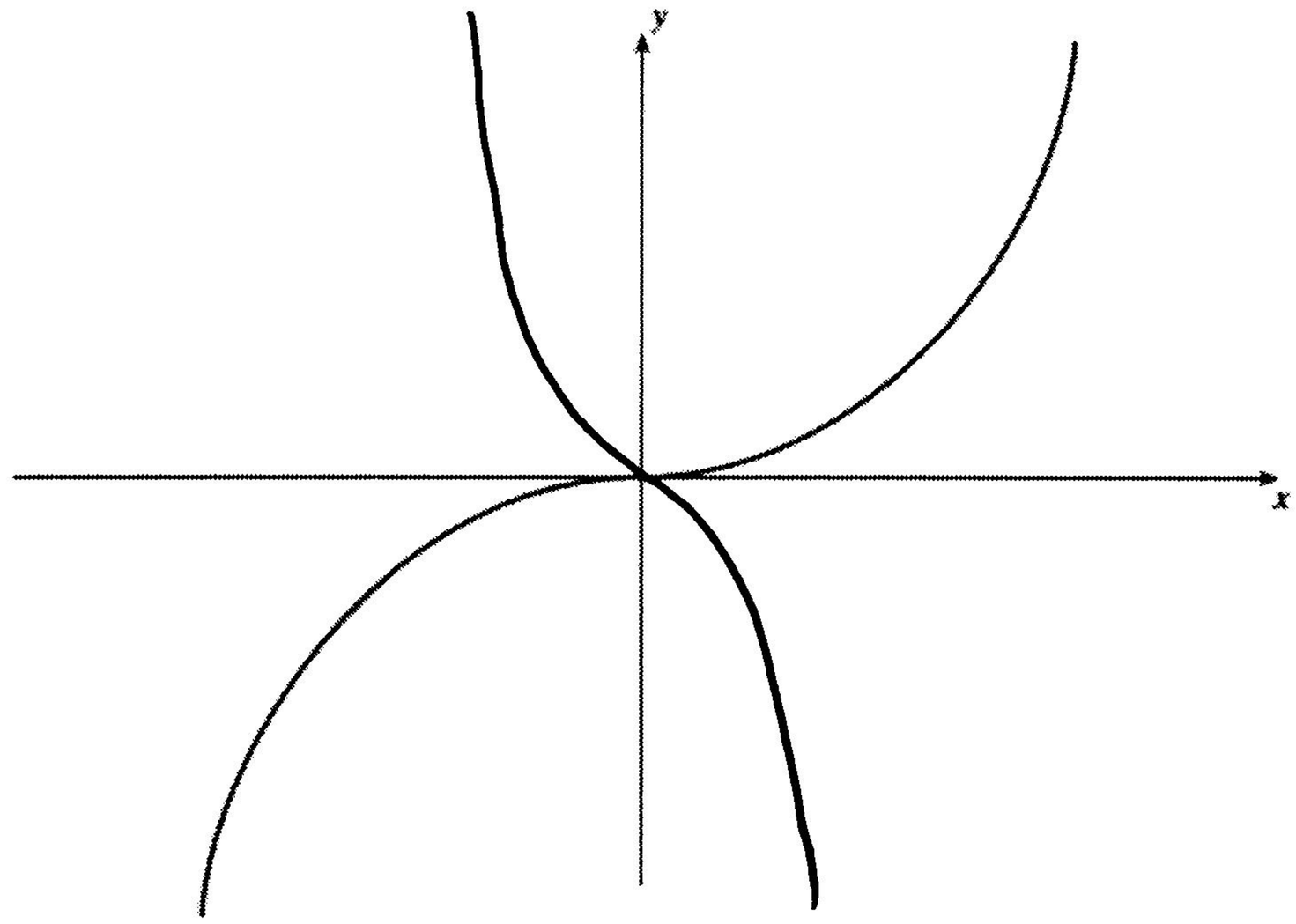
[2]

15 (a) The diagram shows a sketch of $y = x^3$.
On the same axes draw a sketch of $y = -4x^3$.

outside so 4 times steeper.

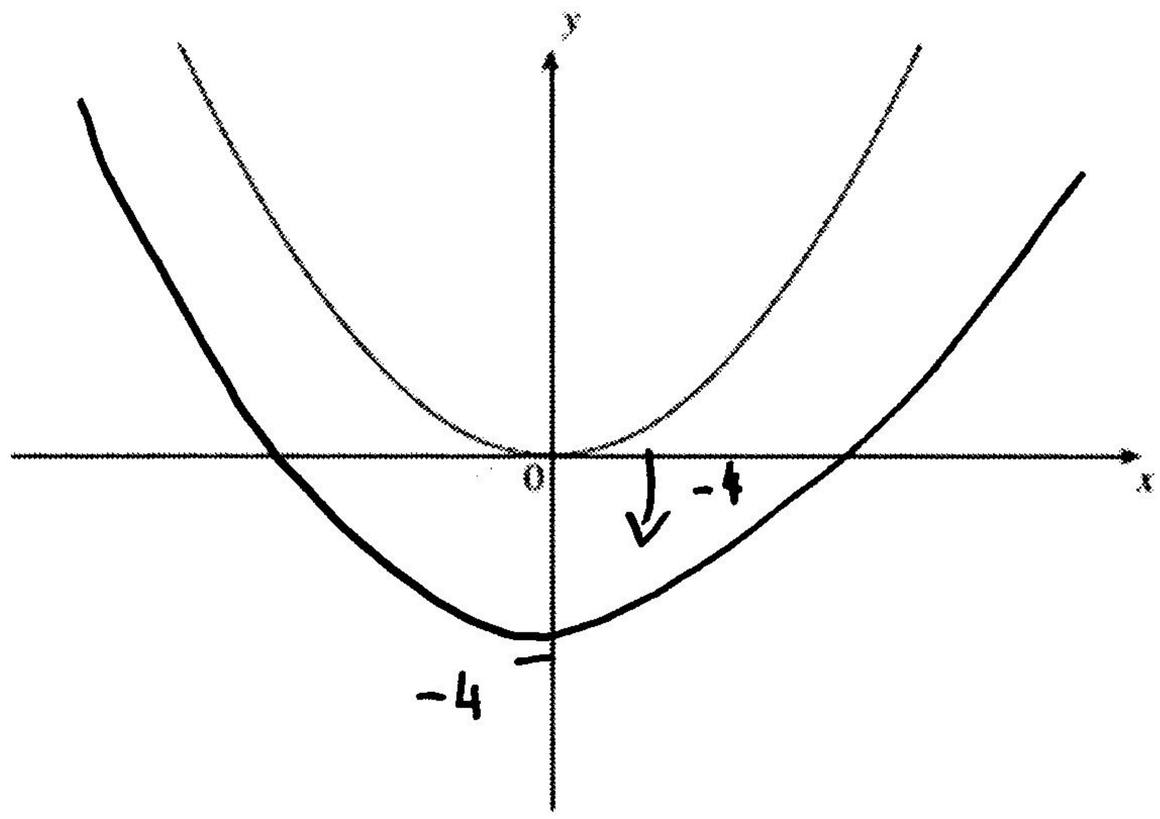
- reflects

[2]



18. *(a)* The diagram shows a sketch of $y = x^2$.
On the same diagram sketch the curve $y = x^2 - 4$.
Mark clearly the coordinates of the point where the curve meets the y-axis.

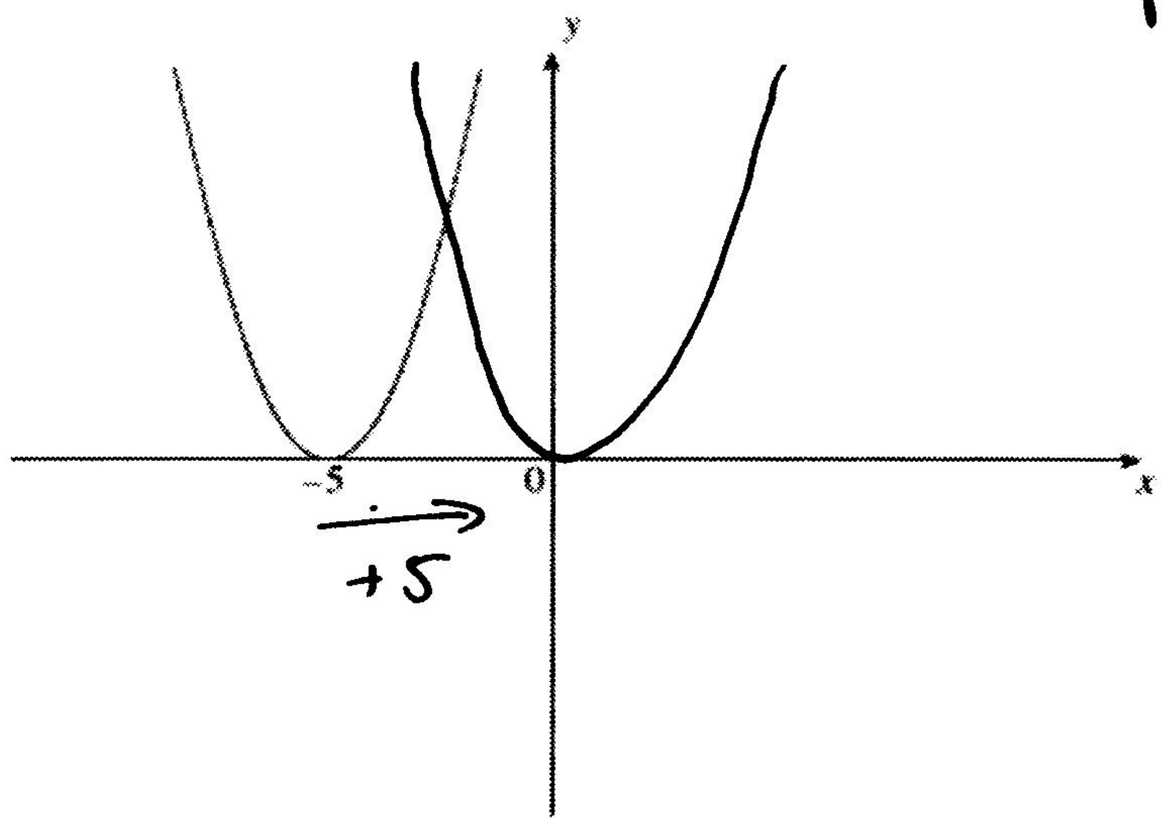
outside so do as it says



[2]

(b) The diagram shows the sketch of $y = f(x)$.
On the same diagram sketch the curve $y = f(x - 5)$.
Mark clearly the point where the curve meets the x-axis.

inside so do the opposite



[2]