

AQA – Further algebra and functions – A2 Further Mathematics P1

1. June/2021/Paper_7367/1/No.1

Find

$$\sum_{r=1}^{20} (r^2 - 2r)$$

Circle your answer.

[1 mark]

2450

2660

5320

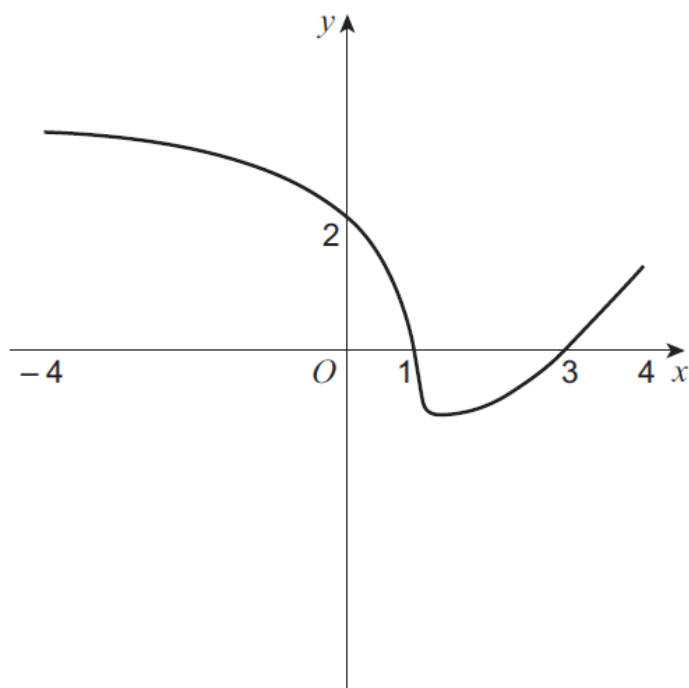
43680

2. June/2021/Paper_7367/1/No.7

The diagram below shows the graph of $y = f(x)$ ($-4 \leq x \leq 4$)

The graph meets the x -axis at $x = 1$ and $x = 3$

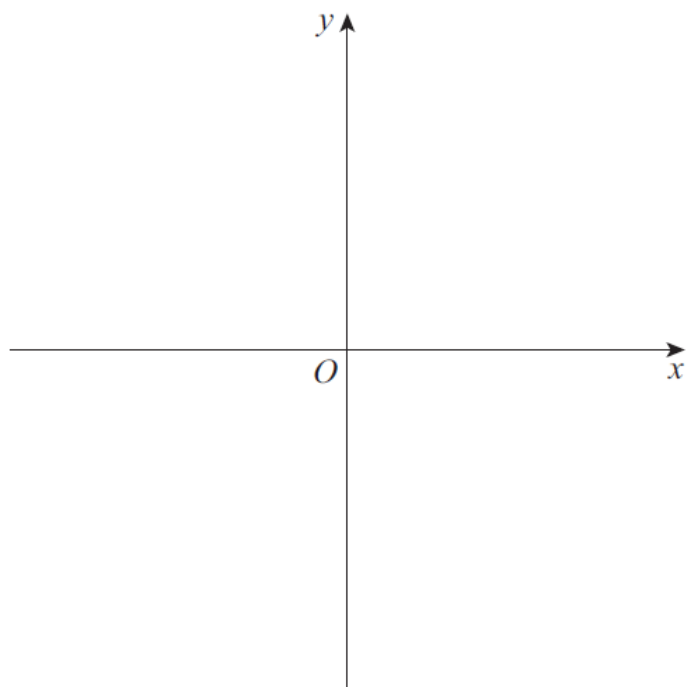
The graph meets the y -axis at $y = 2$



(a) Sketch the graph of $y = |f(x)|$ on the axes below.

Show any axis intercepts.

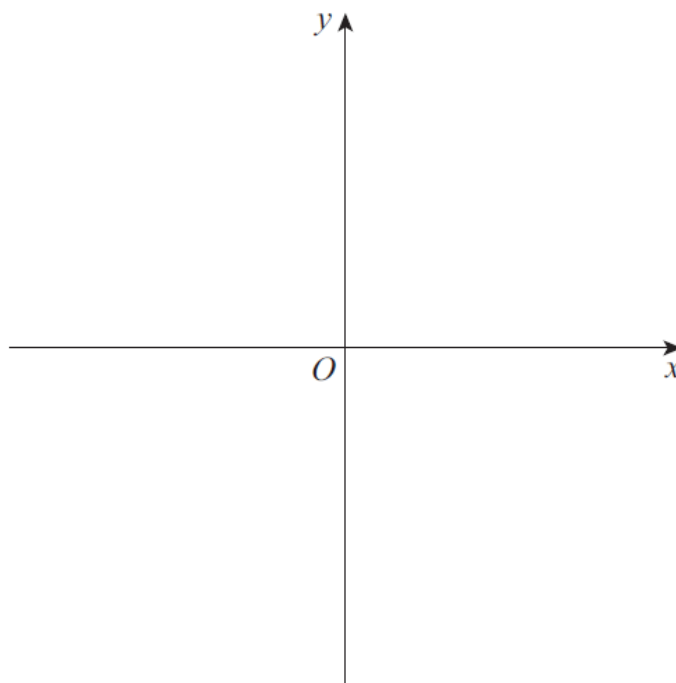
[2 marks]



- (b) Sketch the graph of $y = \frac{1}{f(x)}$ on the axes below.

Show any axis intercepts and asymptotes.

[3 marks]



- (c) Sketch the graph of $y = f(|x|)$ on the axes below.

Show any axis intercepts.

[2 marks]

