Mark schemes

Q1.

(a) Graph of $y = x^3$

Must be in 1st and 3rd quadrants.

B1

(b) Graph of $y = x^2 + 3$

3 need not be marked as long as graph is roughly symmetrical and crosses y-axis above origin

B1

(c) Graph of $y = \frac{1}{x}$

Must be in 1st and 3rd quadrants

B1

[3]

Q2.

$\left(\frac{1}{3}, \frac{1}{9}\right)$

B1

[1]

Q3.

D

B1

[1]

Q4.

4 or 5 points plotted correctly

± ½ square tolerance

M1

Fully correct with a smooth curve

± ½ square tolerance

A1

[2]

Q5.

(a) − 3

B1

32

B1

Additional Guidance

$x = -2, y = -3$

B1

$x = 3, y = 32$

B1

(b) 6 or 7 of their points plotted correctly

tolerance $\pm\frac{1}{2}$ *square*

ft their points

M1

Fully correct smooth increasing curve passing through all 7 correct points

tolerance $\pm\frac{1}{2}$ *square*

A1

[4]