GRAPHICAL SOLUTION of EQUATIONS PPQ'S

Examiner only

(1) The table shows the values of $y = 2x^2 + x - 3$ for values of x from –3 to 3.

x	–3	–2	–1	0	1	2	3
$y = 2x^2 + x - 3$	12	3	–2	–3	0	7	18

(a) On the graph paper opposite, draw the graph of $y = 2x^2 + x - 3$ for values of x between –3 and 3.

[2]

(b) Draw the line $y = 6$ on your graph paper and write down the x-values of the points where your two graphs intersect.

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−2.4 , 1.8

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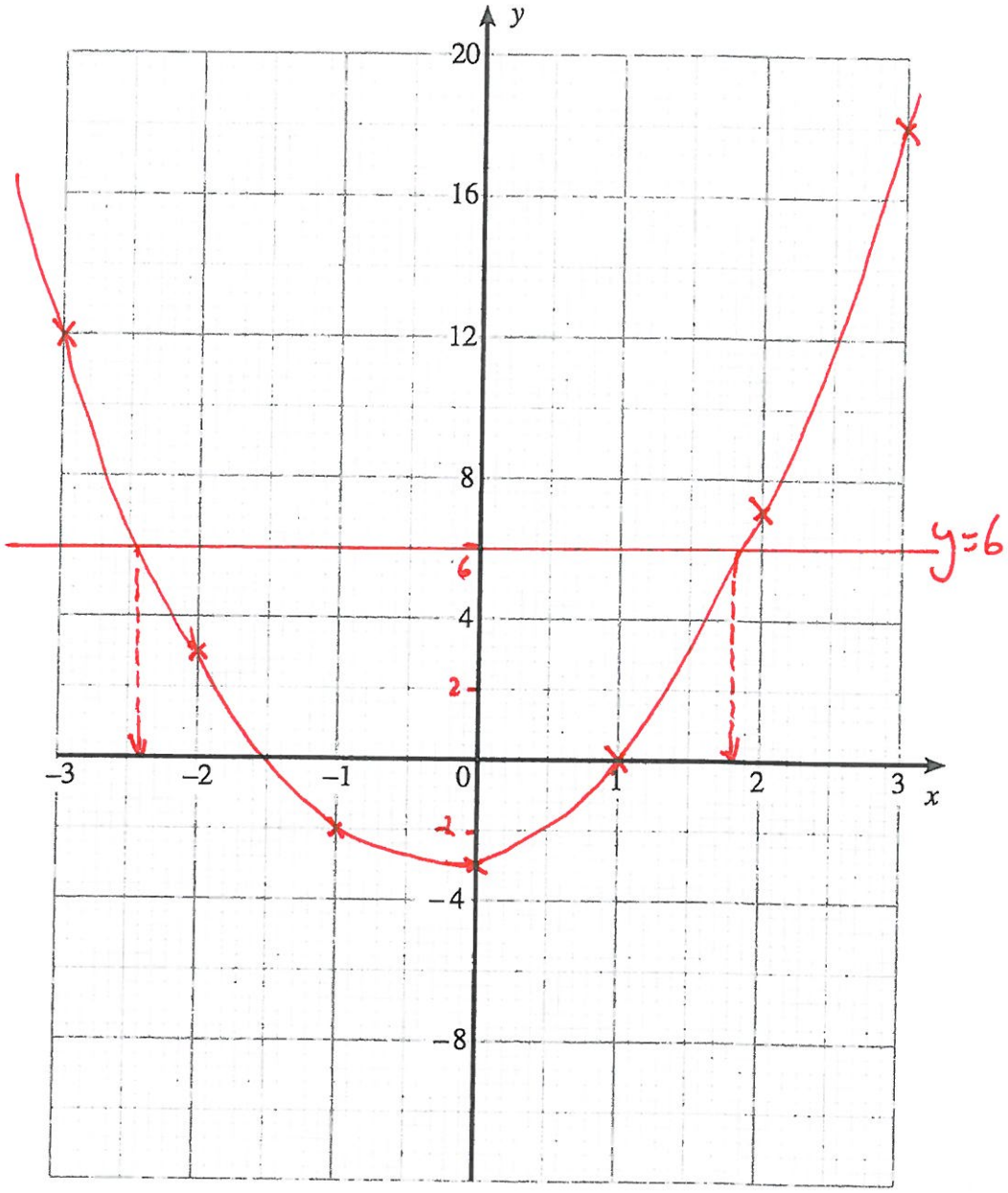
[2]


y
20
16
12
8
6
4
2
−2
−4
−8
−3
−2
−1
0
1
2
3
x
y=6

$x \Rightarrow ( )$

Examiner only

(2) The table shows some of the values of $y = x^3 - 8$ for values of x from –2 to 4.

(a) Complete the table by finding the values of y for $x = -1$ and $x = 3$.

x	–2	–1	0	1	2	3	4
$y = x^3 - 8$	–16	–9	–8	–7	0	19	56

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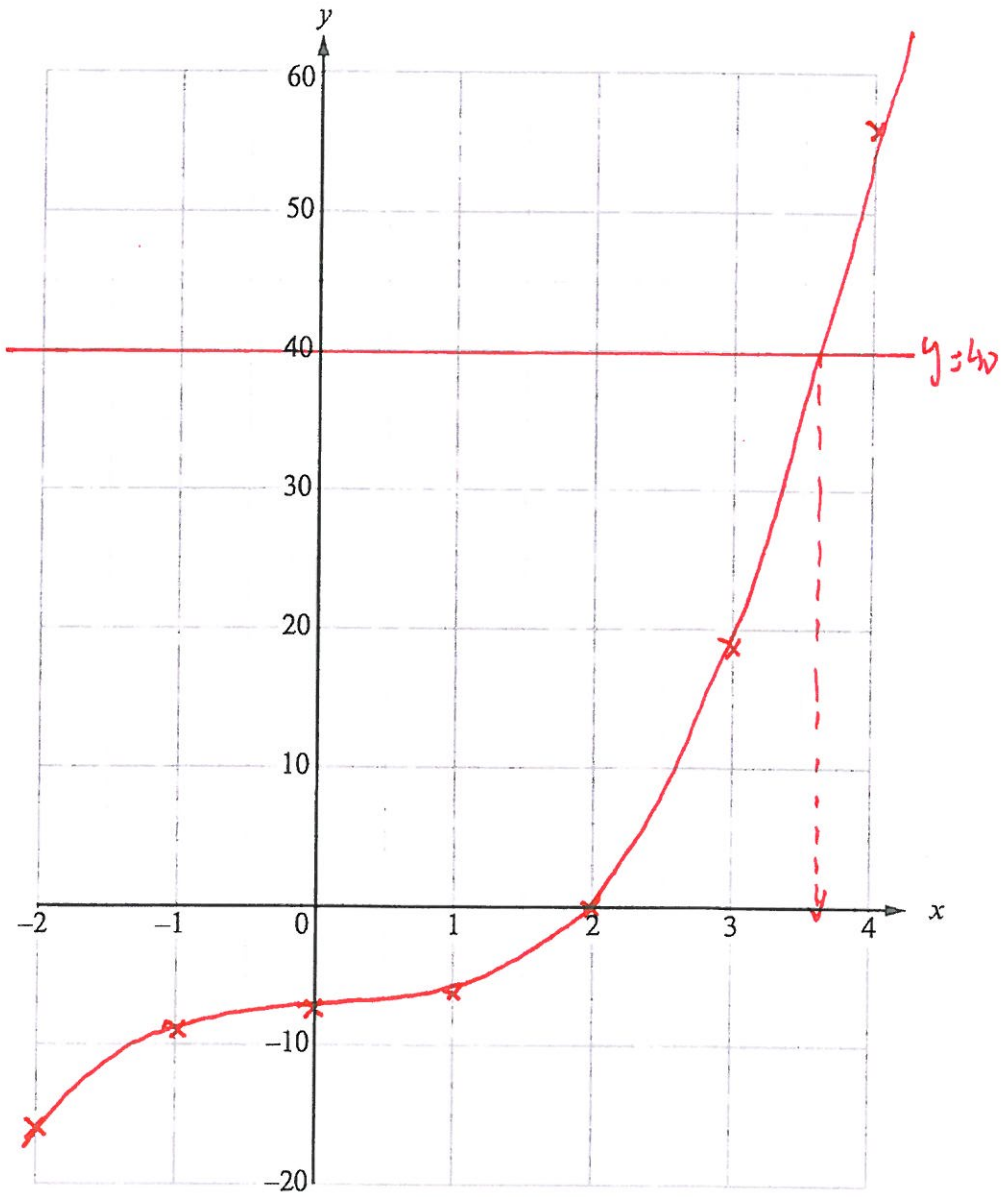
[2]

(b) On the graph paper below, draw the graph of $y = x^3 - 8$ for values of x from –2 to 4.

[2]



Examiner only

(c) Use your graph to solve the equation $x^3 - 8 = 40$.

3.6

[2]