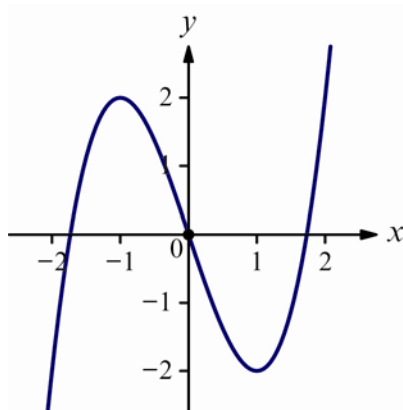


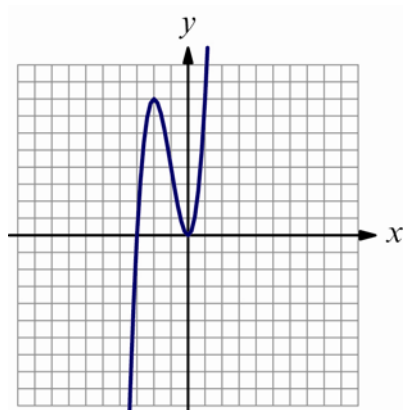
Self-assessment answers: 5 Transformations of graphs

1. (a)



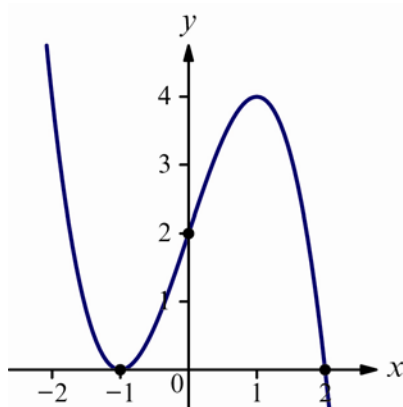
[3 marks]

(b)



[3 marks]

(c)



[3 marks]

2. (a) (i) $(x-3)^2 - 4$

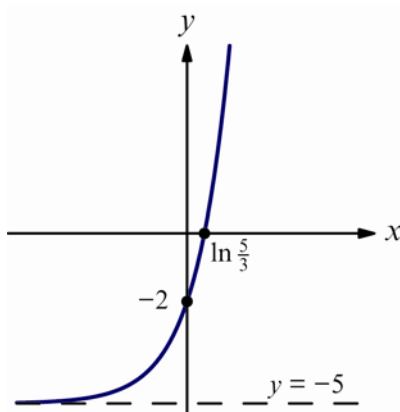
(ii) Translation by $\begin{pmatrix} 3 \\ 4 \end{pmatrix}$

[4 marks]

3. $y = \frac{1}{4}x^2 - 3x + \frac{27}{4}$

[6 marks]

4.



Horizontal asymptote $y = -5$. Intercepts at $(0, -2)$ and $\left(\ln \frac{5}{3}, 0\right)$

[6 marks]

5. (a) $y = 3x^2 - bx + 5$

[2 marks]

(b) $b = 0$

[3 marks]