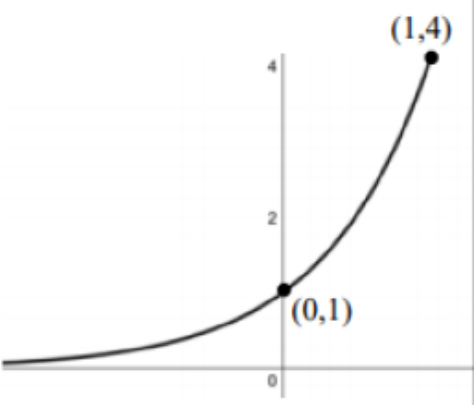
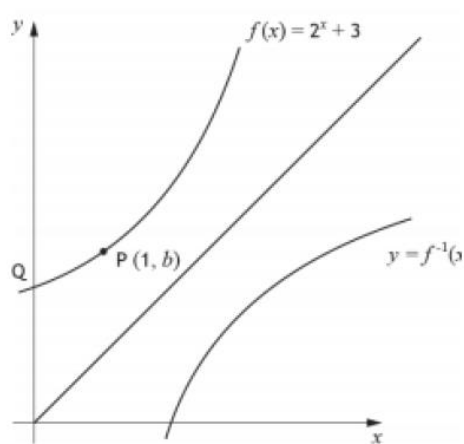


2019 P1 Q10	(a) $a = 3$ (b) $k = -2$	
2018 P1 Q11a only	(a) $\bullet^1$ a generally decreasing curve above the x-axis for $1 < x < 3$ $\bullet^2$ asymptote at $x = 0$ and passing through $(3,0)$ and continuing to decrease for $x \geq 3$	
2017 P1 Q15a only	(a) $a = -5, b = 3$	
2016 P1 Q10	$\bullet^1$ graph reflected in $y = x$ $\bullet^2$ correct annotation	$\bullet^1$  $\bullet^2$ $(0,1)$ and $(1,4)$
2015 P1 Q4	$p = 3, \quad q = 4, \quad r = 1$	

2015 P1 Q13

(a) $b = 5$

(b) (i)

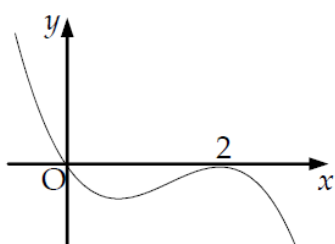


(ii) $P(5, 1)$ $Q(4, 0)$

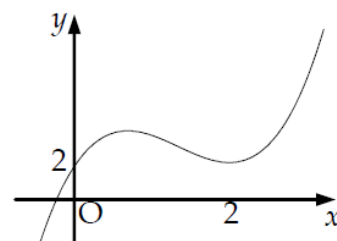
(c) $R(2, -7)$

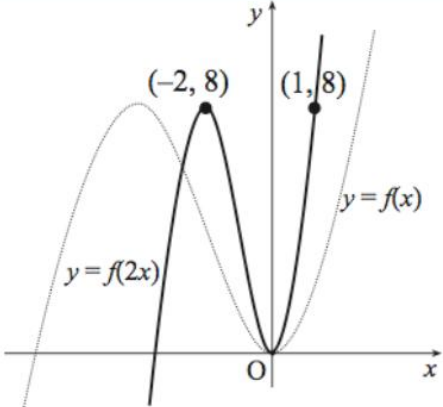
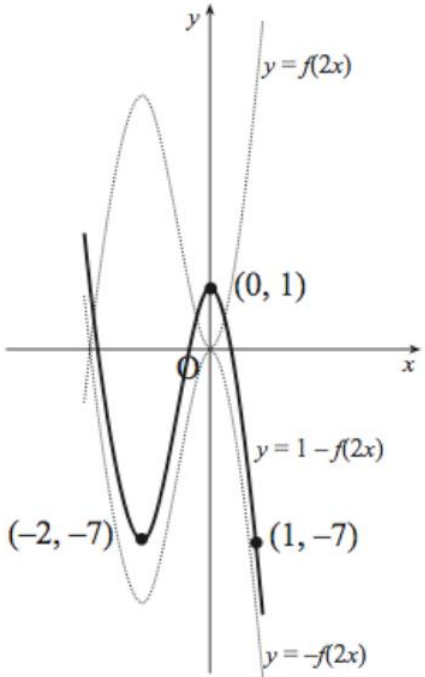
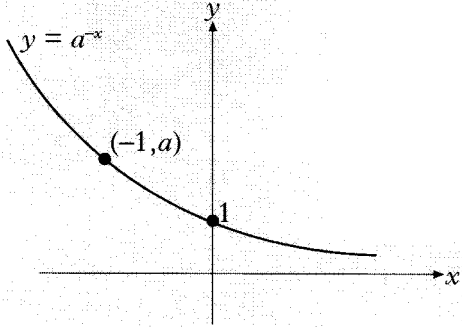
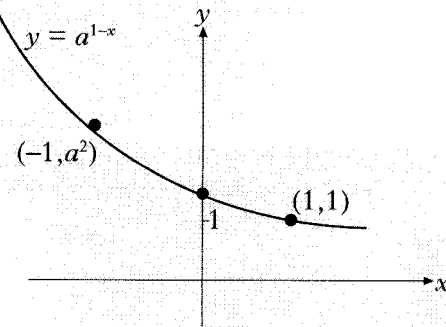
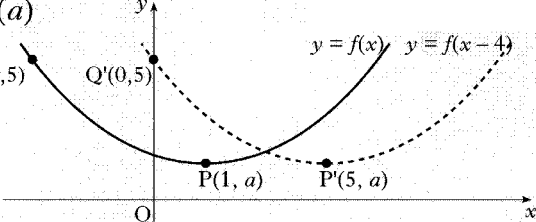
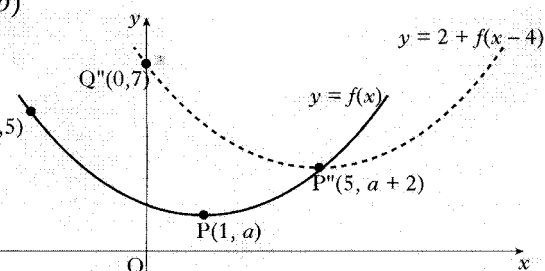
2012 P2 Q4

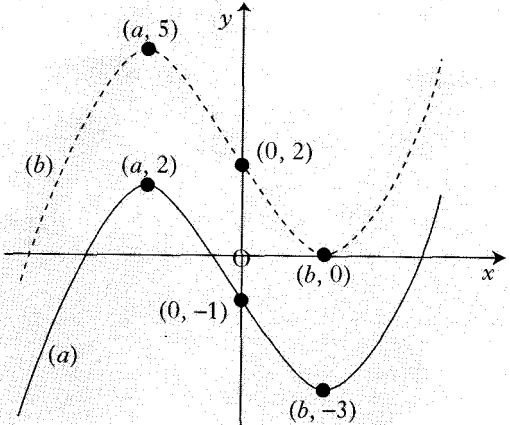
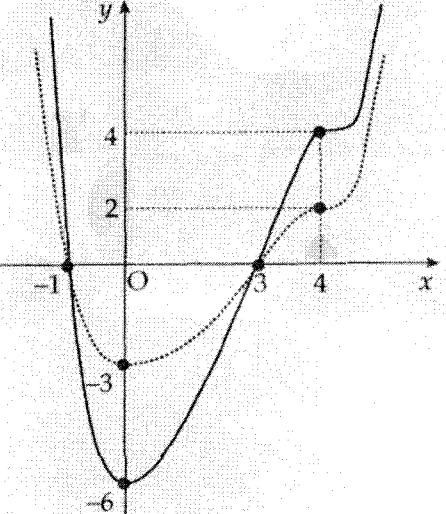
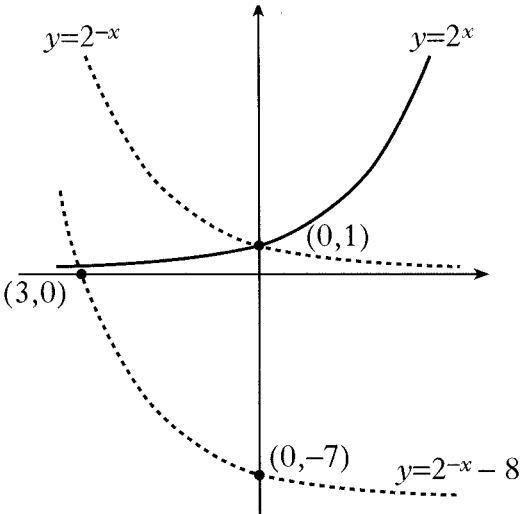
Graph for (a)

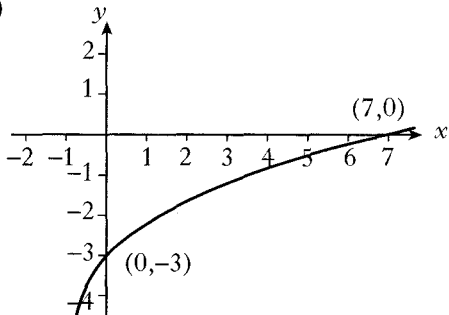
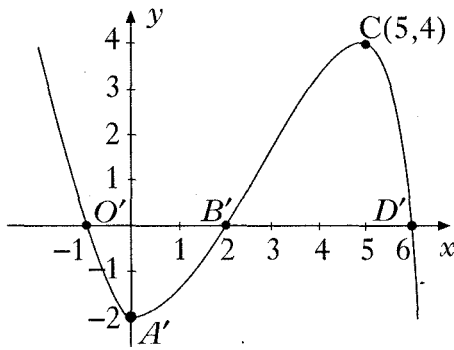


Graph for (b)



2009 P1 Q23	Solution to (a) 	Solution to (b) 
2007 P2 Q9	(a)  (b) 	
2006 P2 Q7	7. (a)  (b) 	

2004 P1 Q4	(a) Reflect in x-axis. (b) Translate +3 parallel to y-axis 	2 2
2003 P2 Q5		
2002W P1 Q8	(a) & (b) Reflect graph in y-axis followed by a translation $\begin{pmatrix} 0 \\ -8 \end{pmatrix}$ 	

2002 P1 Q7	(a) $x = 7$ (b) $3x + 2y = 23$ (c) $(7, 1)$	
2001 P1 Q10	(a) $a = 1, b = 3$ (b) 	
2000 P1 Q2	(a) $A = (1, 4)$ (b) $f(x)$ needs to be translated 4 units up, 2 units left Sketch with A' at $(-1, 8)$ and B' at $(1, 4)$ (c) $4 < k < 8$	
Specimen 2 P2 Q5	(i)  (ii) 