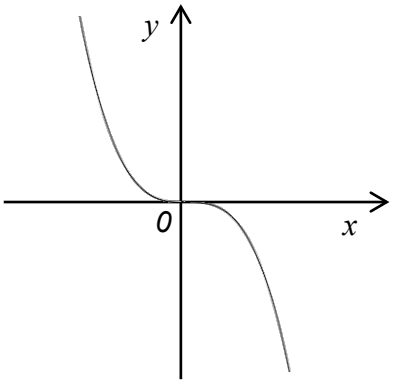
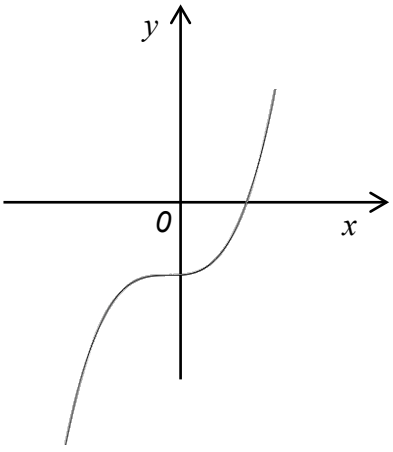
Topic Test 1 Mark Scheme

Transforming functions - Higher

Q	Answer	Mark	Comments
1	Graph A matches $y = (x - 2)^2$ Graph B matches $y = x^2 + 2$ Graph C matches $y = -x^2$ Graph D matches $y = (x + 2)^2$	B2	B1 1 or 2 correct
2(a)		B1	
2(b)		B1	

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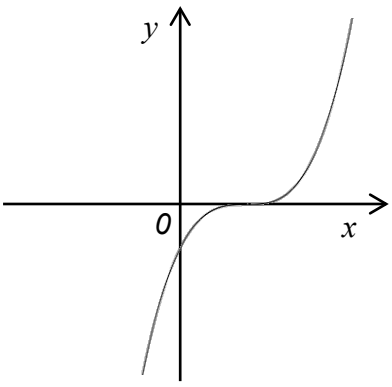
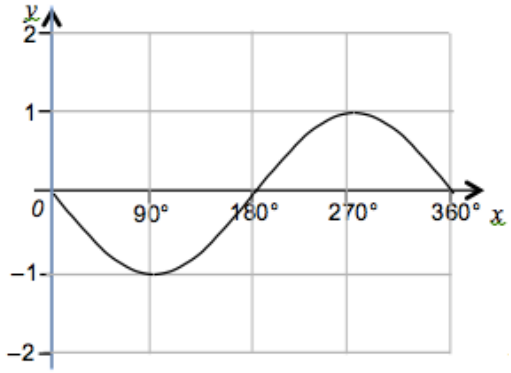
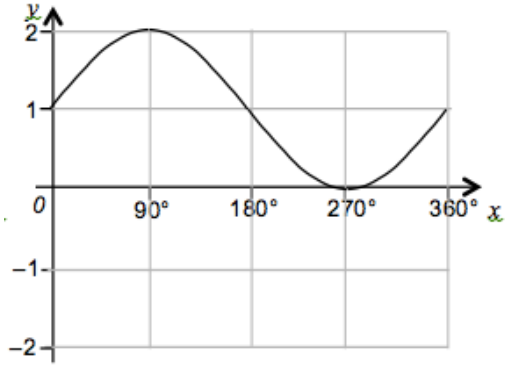
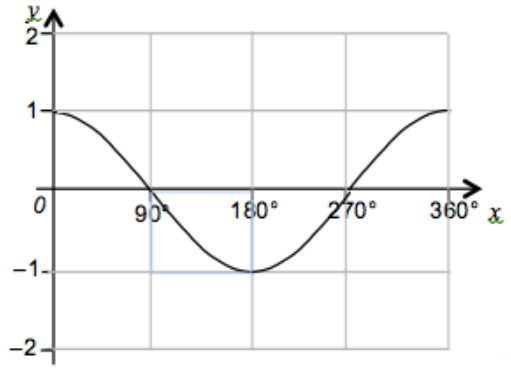
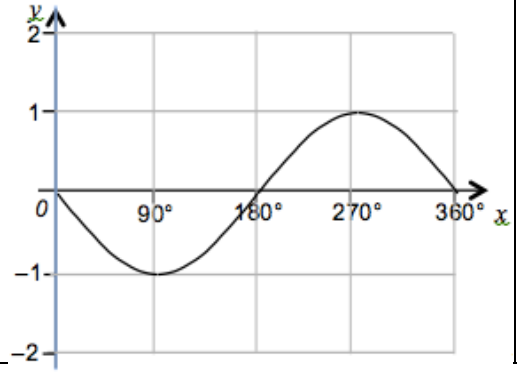
Q	Answer	Mark	Comments
2(c)		B1	
3(a)	$y = x^2 - 4$	B1	
3(b)	$y = (x + 4)^2$	B1	

Q	Answer	Mark	Comments
4(a)		B1	
4b		B1	
4c		B1	
4d		B1	

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Q	Answer	Mark	Comments
5(a)	A' = (–3, 2) B' = (0, 4)	B2	B1 each
5(b)	A'' = (0, 0) B'' = (3, 2)	B2	B1 each
6(a)	$y = \cos x - 1$	B1	
6(b)	$y = -\cos x$ or $y = \cos(x - 180)$	B1	
6(c)	$y = \cos(x + 90)$	B1	
7	$f(x) = x^2$ and $f(x) = \cos x$	B1	