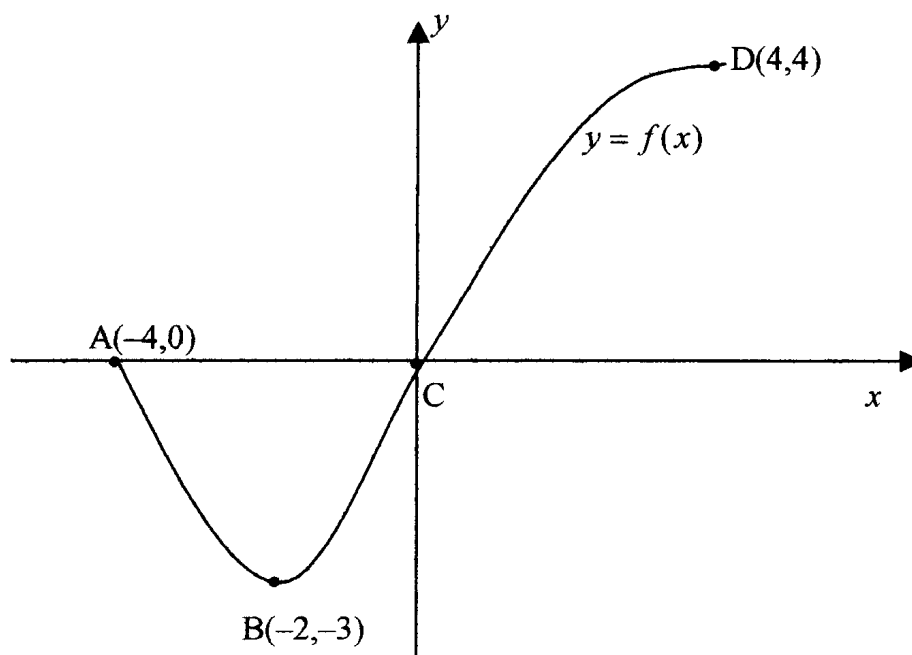


GRAPHS OF RELATED FUNCTIONS

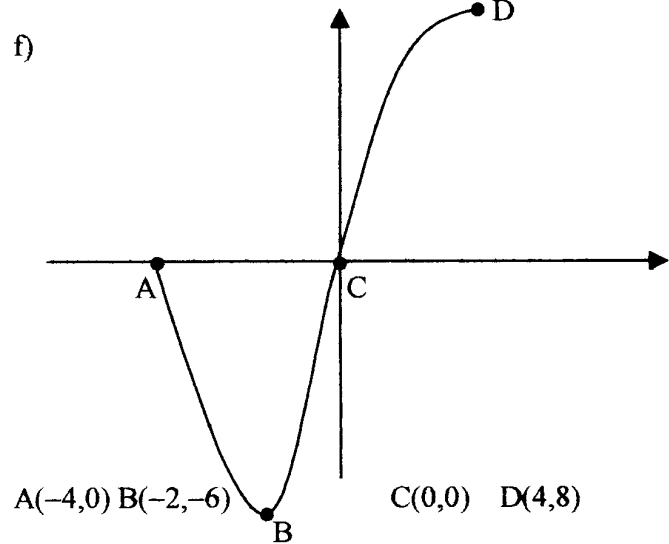
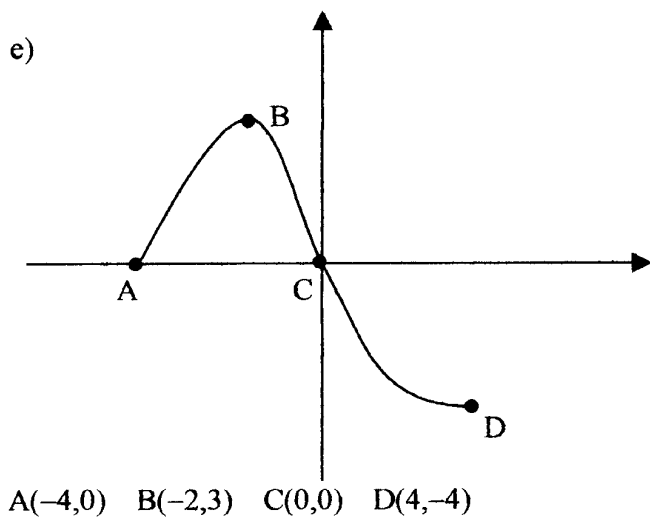
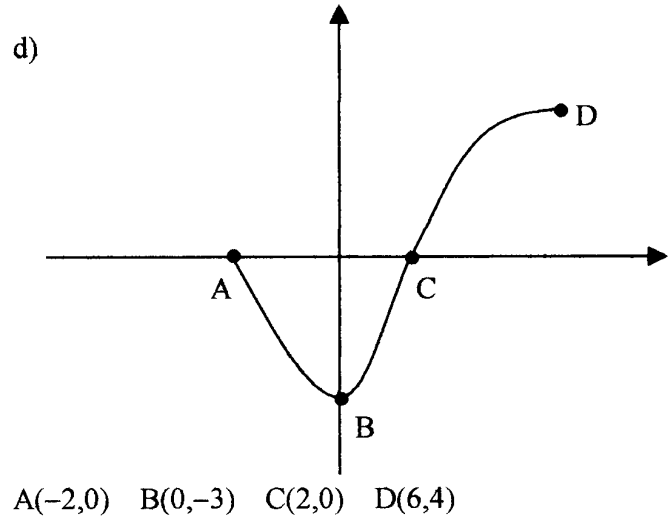
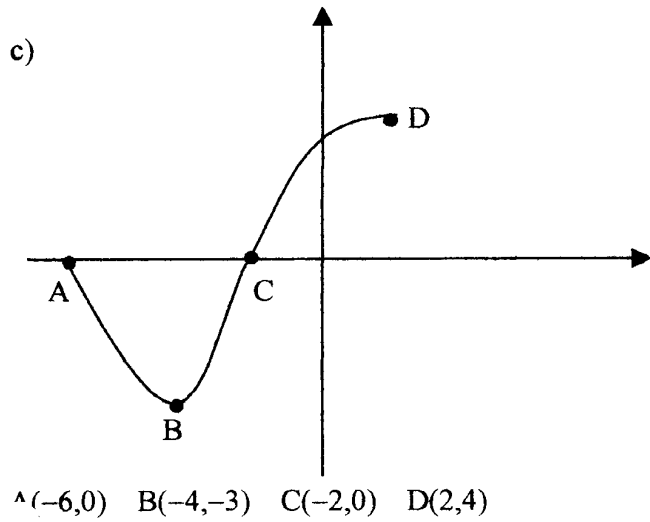
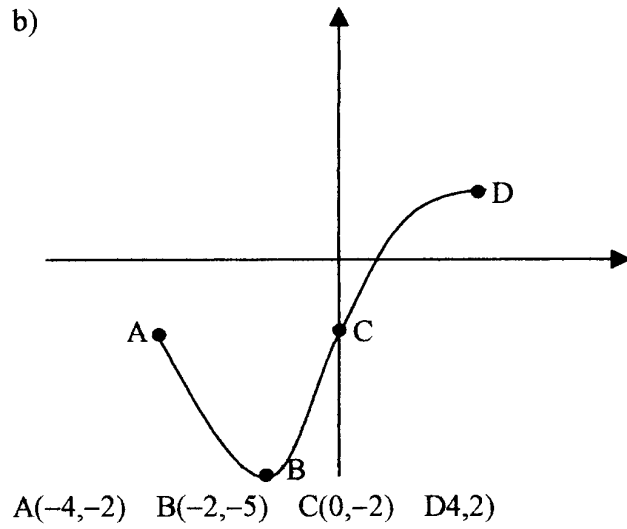
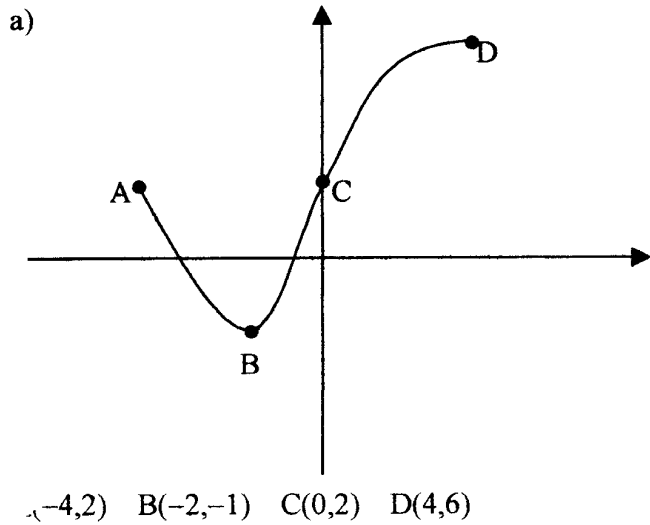


Sketch on separate diagrams:

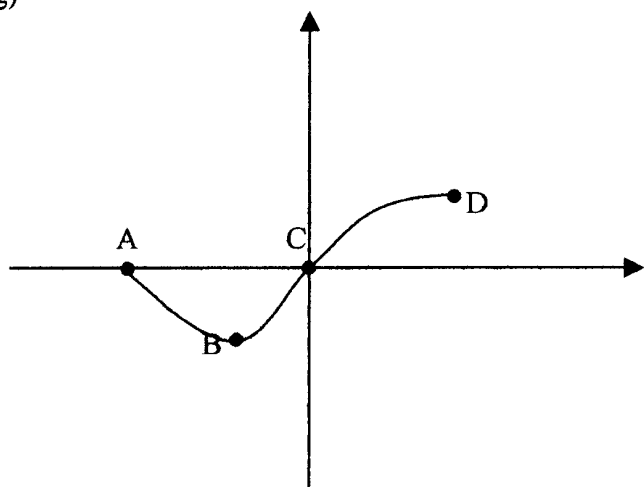
- a) $y = f(x) + 2$
- b) $y = f(x) - 2$
- c) $y = f(x + 2)$
- d) $y = f(x - 2)$
- e) $y = -f(x)$
- f) $y = 2f(x)$
- g) $y = \frac{1}{2}f(x)$
- h) $y = 1 - f(x)$
- i) $y = 2f(x + 2)$
- j) $y = f(2x)$

Give the co-ordinates of the images of A, B, C and D in each case.

GRAPHS OF RELATED FUNCTIONS SOLUTIONS

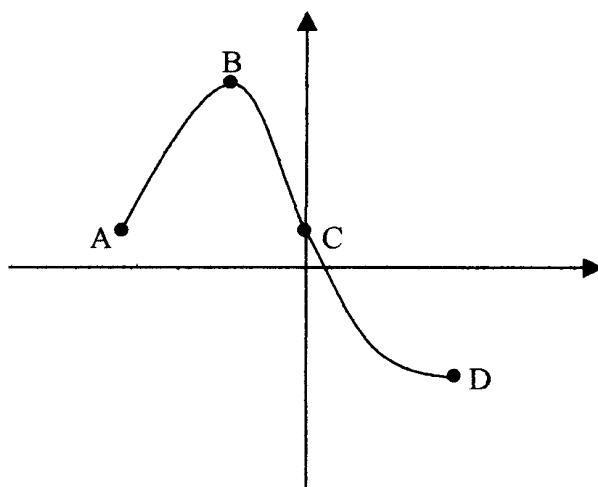


g)



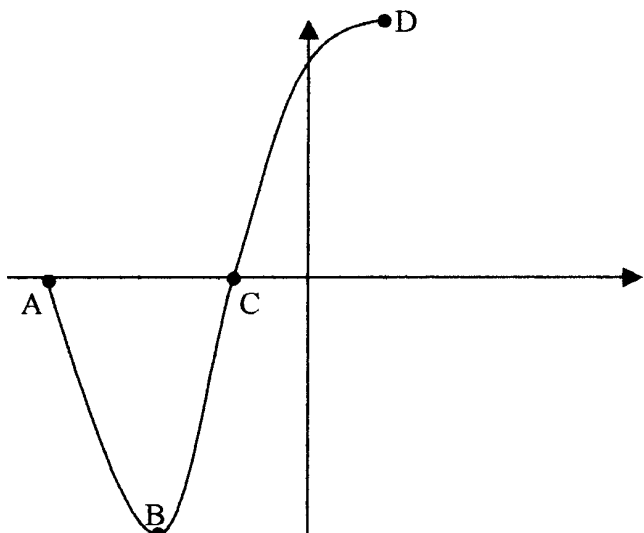
$A(-4,0)$ $B(-2,-1.5)$ $C(0,0)$ $D(4,2)$

h)

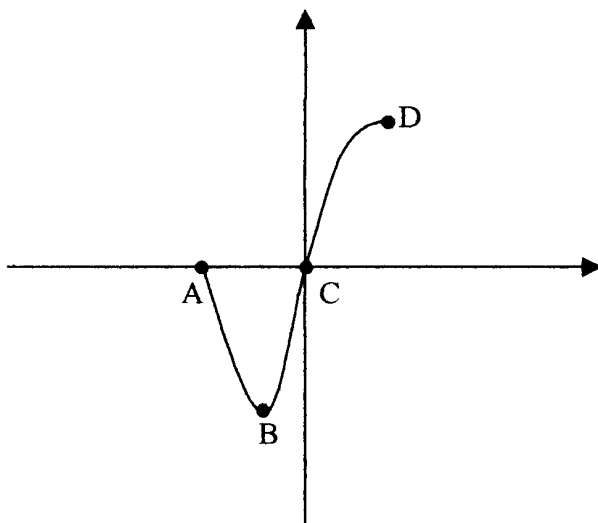


$A(-4,1)$ $B(-2,4)$ $C(0,1)$ $D(4,3)$

j)



$A(-6,0)$ $B(-4,-6)$ $C(-2,0)$ $D(2,8)$



$A(-2,0)$ $B(-1,-3)$ $C(0,0)$ $D(2,4)$