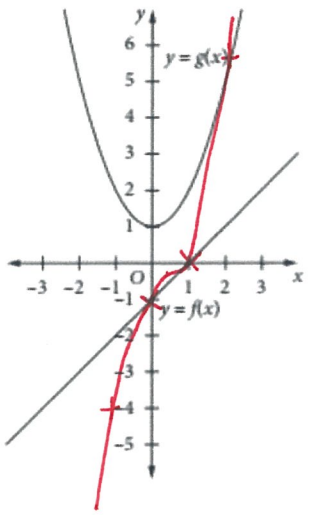
GRAPHING POLYNOMIALS BY MULTIPLYING ORDINATES

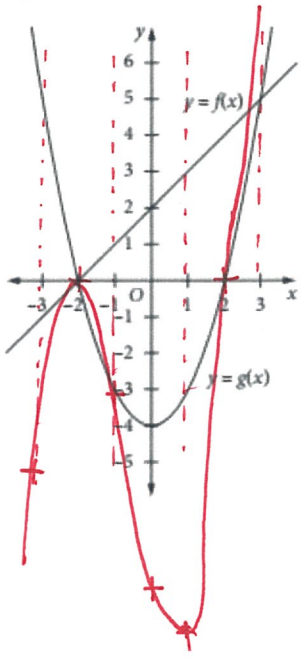
1 The graphs of $y = f(x)$ and $y = g(x)$ are shown. By drawing vertical lines and multiplying ordinates, draw the graph of $y = f(x)\,g(x)$. Comment on the new curve.

(a)

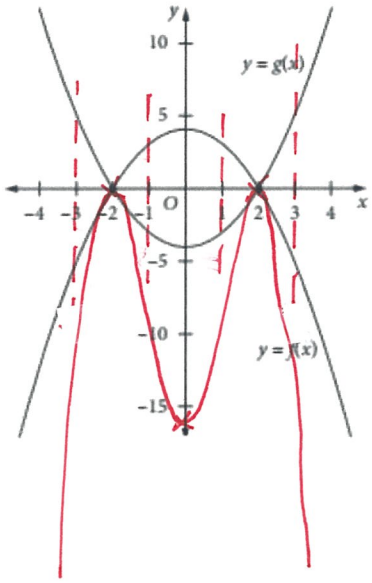


cubic (as it's the product of a quadratic and a linear function)

(b)

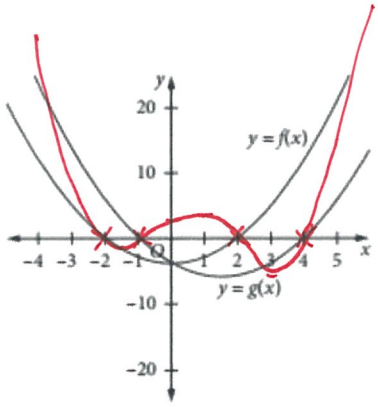


(c)



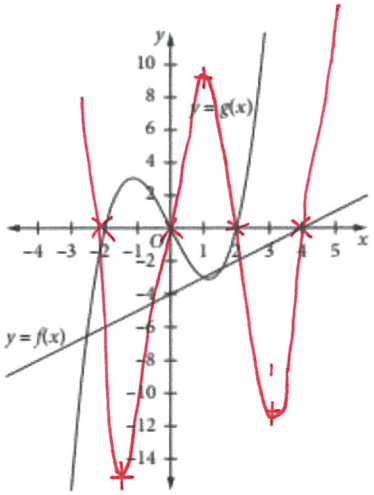
quartic function.

(d)



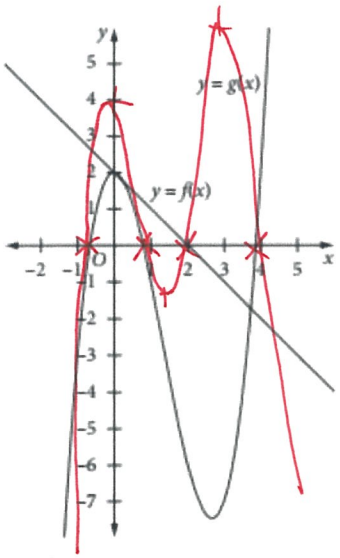
quartic function

(e)



quartic function

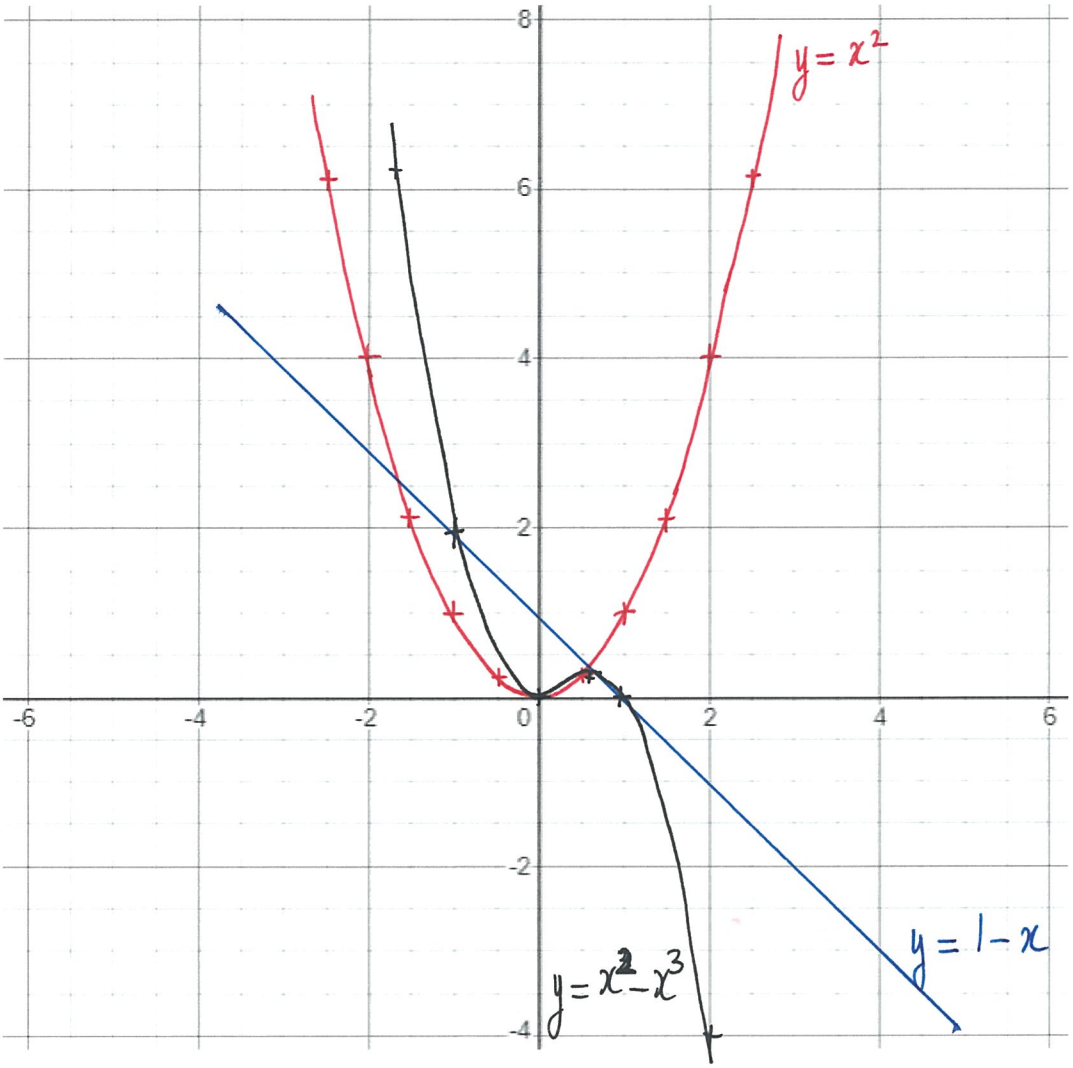
(f)



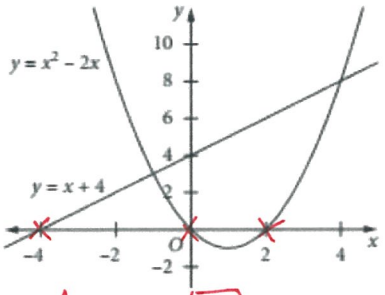
quartic function

GRAPHING POLYNOMIALS BY MULTIPLYING ORDINATES

2 On the same diagram, sketch the graphs of $y = x^2$ and $y = 1 - x$. Use these graphs to sketch $y = x^2 - x^3 = x^2(1 - x)$



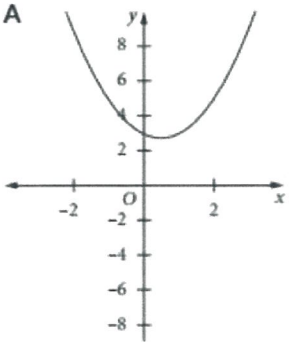
5 The graphs of $y = x + 4$ and $y = x^2 - 2x$ are shown.



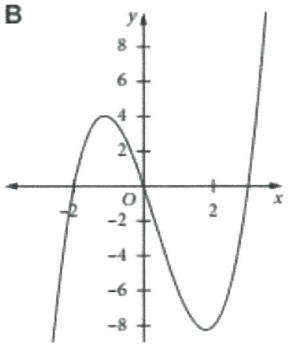
Which diagram represents the graph of $y = (x + 4)(x^2 - 2x)$?

Answer C

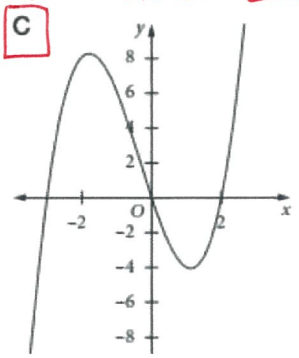
A



B



C



D