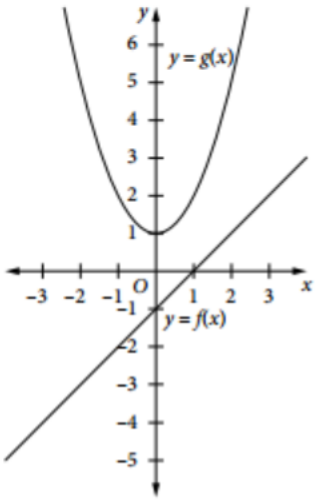
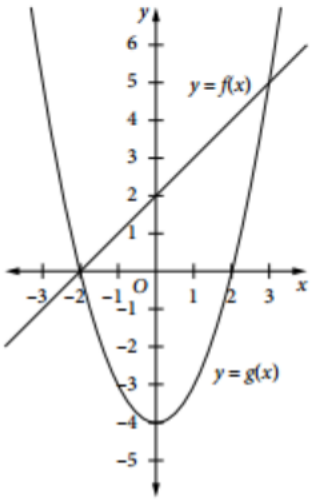
GRAPHING POLYNOMIALS BY MULTIPLYING ORDINATES

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.

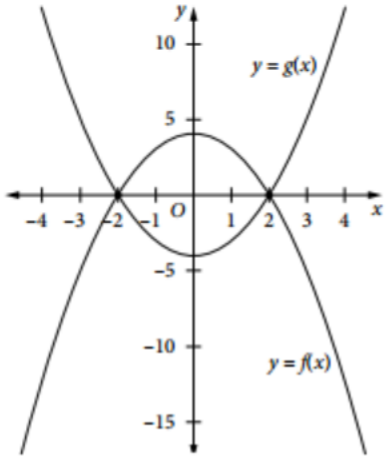
(a)



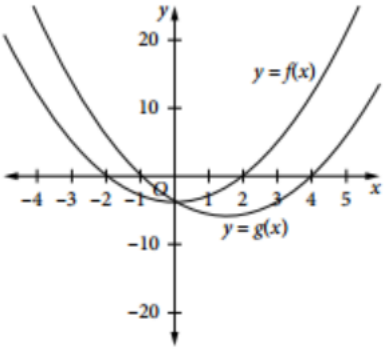
(b)



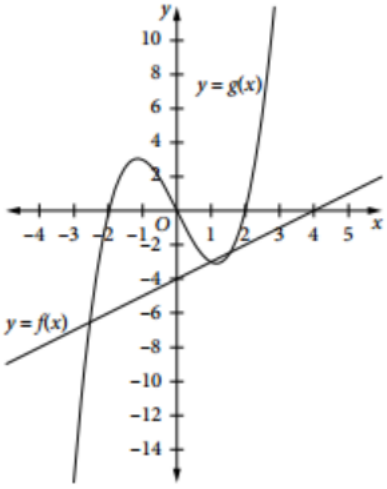
(c)



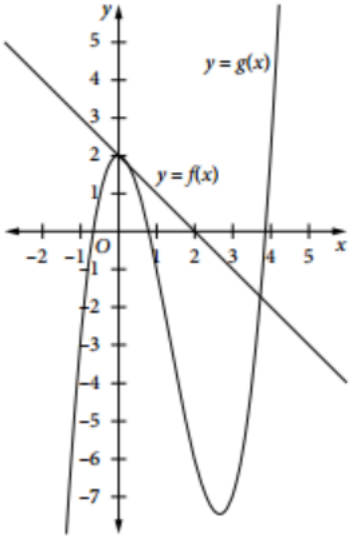
(d)



(e)



(f)



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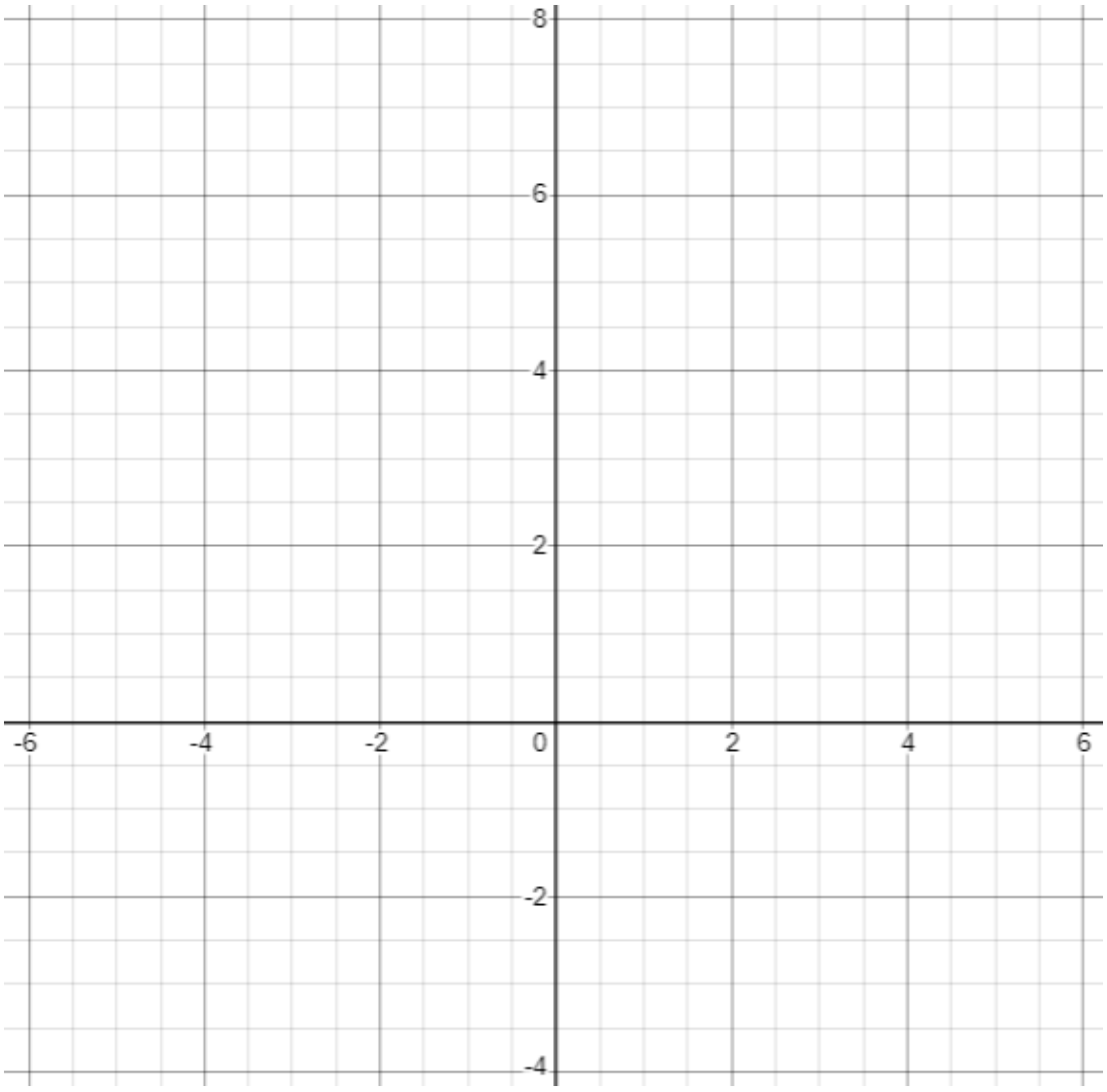
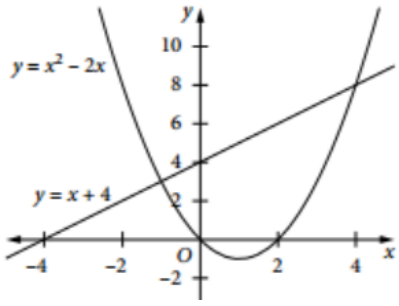
2 On the same diagram, sketch the graphs of $y = x^2$ and $y = 1 - x$. Use these graphs to sketch $y = x^2 - x^3$.

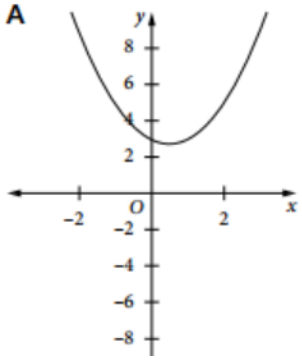


5 The graphs of $y = x + 4$ and $y = x^2 - 2x$ are shown.

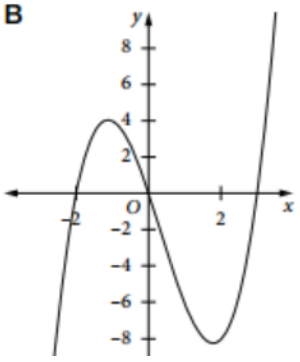


Which diagram represents the graph of $y = (x + 4)(x^2 - 2x)$?

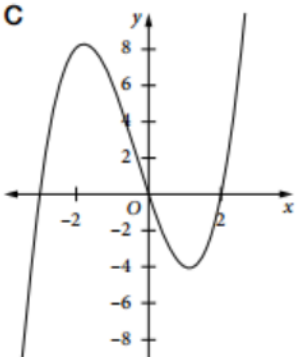
A



B



C



D