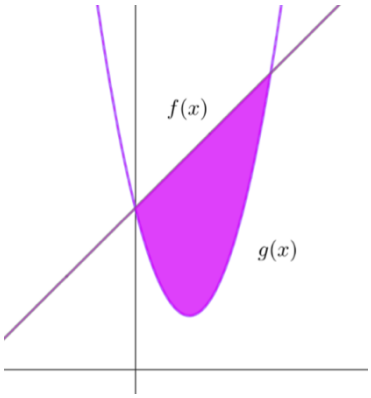
Higher Maths question bank :: Paper 1

12. Area under a graph

1. A line is described by function $f(x) = x + 6$.
   A curve is described by function $g(x) = x^2 - 4x + 6$.

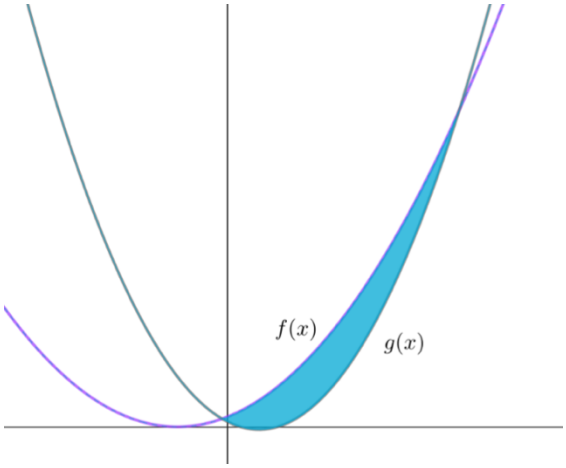


a) Find the points of intersection of f and g.

b) Express the enclosed area as an integral.

c) Evaluate the integral to find the area.

2. The graphs of functions f and g are shown, where
   $f(x) = x^2 + 4x + 4$ and $g(x) = 2x^2 - 1$.



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