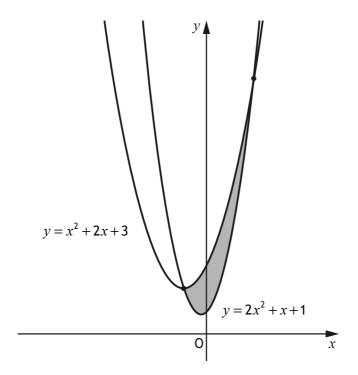
**8.** The graphs of  $y = x^2 + 2x + 3$  and  $y = 2x^2 + x + 1$  are shown below.



The graphs intersect at the points where x = -1 and x = 2.

- (a) Express the shaded area, enclosed between the curves, as an integral.
- (b) Evaluate the shaded area.