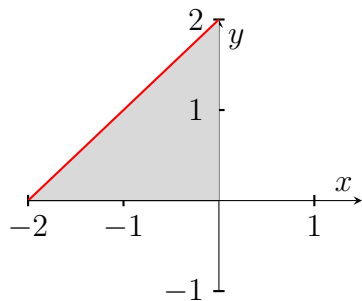
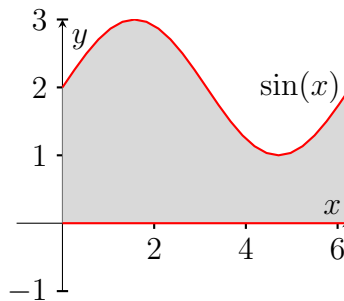


## Section 8: Integration

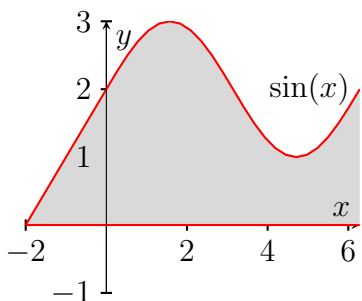
Q1) Suppose you are integrating a function  $g(x, y) : \mathbb{R}^2 \rightarrow \mathbb{R}$  on the following shaded regions. Express the integral with appropriate bounds.



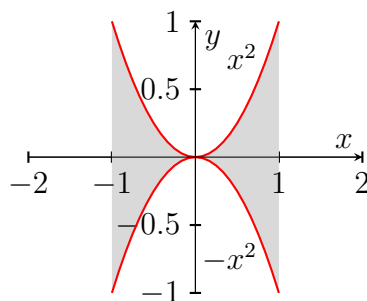
(a)



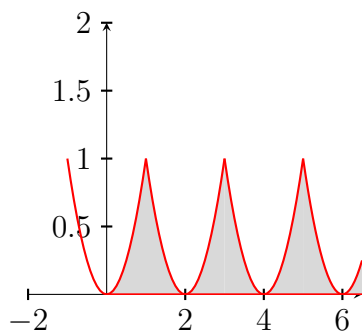
(b)



(c) *hint: use (a) and (b).*



(d)



(e) **Challenge Problem**

Q2) For parts (a), (b) and (d) in question 1, rewrite the integral by switching the order of integration.