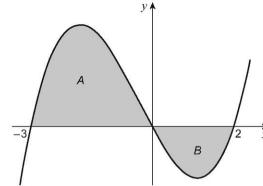
The graph of y = f(x) intersects the x-axis at (-3, 0), (0, 0) and (2, 0) as shown in the diagram below.



The shaded region A has an area of 189

The shaded region B has an area of 64

Find the value of $\int_{3}^{2} f(x) dx$

Circle your answer.

[1 mark]

-253

-125

125

253