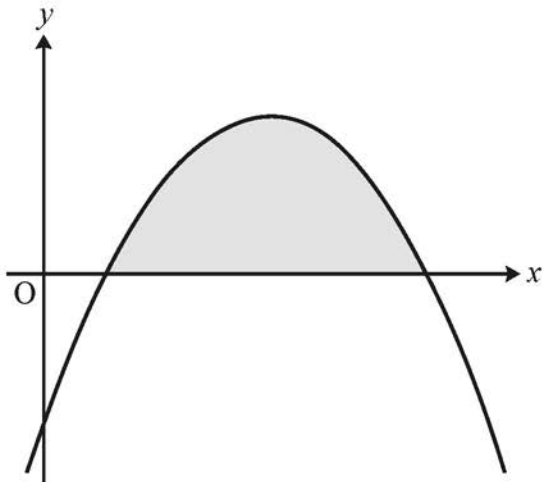


7 In this question you must show detailed reasoning.



Find the exact area of the shaded region shown in the diagram, enclosed by the x -axis and the curve $y = -3x^2 + 7x - 2$.

[6]