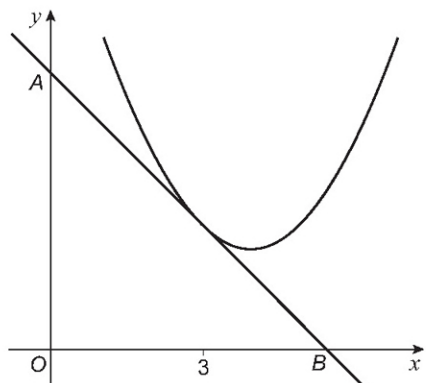
8 A curve has equation

$$y = x^2 - 8x + 20$$

8 (a) Find $\frac{dy}{dx}$ **[2 marks]**

8 (b) The line L is the tangent to the curve with equation $y = x^2 - 8x + 20$ at the point where $x = 3$ as shown in **Figure 2**

Figure 2



The line L crosses the y-axis at point A and the x-axis at point B

Find the area of triangle OAB **[6 marks]**