

2.88

4

$$\textcircled{b} \quad y' = -2 = -2x + a \rightarrow \boxed{a = 2x - 2} \quad \text{קו مماس}$$

$$y = -2x + 7$$

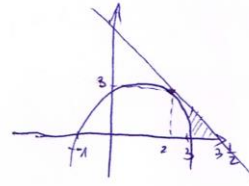
$$-2x + 7 = -x^2 + ax + 3$$

$$-2x + 7 = -x^2 + x(2x - 2) + 3$$

$$-2x + 7 = -x^2 + 2x^2 - 2x + 3$$

$$4 = x^2$$

$$\boxed{x = \pm 2} \rightarrow \begin{matrix} x = ? \\ a = ? \end{matrix} \rightarrow \boxed{a = 2}$$



$$S = \int_2^3 (-x^2 + 2x + 3) dx = \frac{3 \cdot 1 \frac{1}{2}}{2} - \left(\frac{x^3}{3} + x^2 + 3x \Big|_2^3 \right) =$$

$$= 2 \frac{1}{4} - (-9 + 9 + 9) + (-\frac{8}{3} + 4 + 6) = \frac{7}{12}$$