

Q. 1. Find the slope of the tangent to the curve  $y = 3x^4 - 4x$  at  $x = 4$

Ans: given curve is  $y = 3x^4 - 4x$ .

$$\frac{dy}{dx} \Big|_{x=4} = 12x^3 - 4 \Big|_{x=4} = 12 \times 4^3 - 4 = 764$$