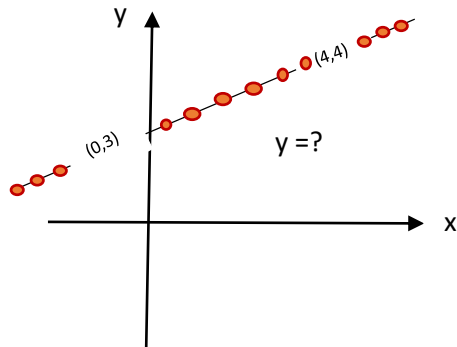


Target – a line



The equation of the line

A (0,3)      B(4,4)

(a) Find the slope

$$a = \frac{4-3}{4-0} = \frac{1}{4}$$

(b) (0,3)     $a = \frac{1}{4}$

$$y + 3 = \frac{1}{4}x \Rightarrow y = \frac{1}{4}x - 3$$

Given parabola  $y = x^2 - 4x$ , and Point B(2,-4)

Find the equation of the tangent through B

$y' = 2x - 4$ , the slope of any point (parabola)

$y'(2) = 2 \cdot 2 - 4 = 0$ , the slope of tangent

B (2, -4)

The tangent is  $Y = -4$