Find the parameters parabola

Given: $y'(1) = 3$, the slope

B(1,6)

$x = \frac{1}{4}$, Min

$y = ax^2 + bx + c$

$y' = 2ax + b$

$y'(1) = 2a.1 + b = 3$

$y' = 2ax + b$

$y'(\frac{1}{4}) = 0 \quad \Rightarrow 2a.\frac{1}{4} + b = 0$

$\frac{a}{2} + b = 0$

$2a + b = 3$

$\frac{a}{2} + b = 0$

$1\frac{1}{2}a = 3 \quad a = 2$

$b = -1$

$B(1,6) \Rightarrow \quad 6 = a + b + c$

$6 = 2 + (-1) + c$

$c + 1 = 6$

$c = 5$

The Parabola is

$y = 2x^2 - x + 5$