

⑨ $f(3) = 7$ $f'(3) = 8$ Equation Tangent line $x = 3$

$(3, 7)$
 $m = 8$

$y - y_1 = m(x - x_1)$
Point slope

$y - 7 = 8(x - 3)$

$y = mx + b$
slope-Intercept $y = 8x - 17$

$y - 7 = 8x - 24$

⑩ $f(x) = x^3 - 2x$ $[0, 2]$ Rolles Th

$f(0) = (0)^3 - 2(0) = 0$
 $f(2) = (2)^3 - 2(2) = 4$
 \neq Not apply

⑪ $s(t) = 4t^{-2} - 3t$

velocity when $t = 3$

$v(3) = \frac{-8}{27} - \frac{81}{27} = \frac{-89}{27}$

$s'(t) = 4(-2t^{-3}) - 3$

$s'(t) = v(t)$

$v(t) = \frac{-8}{t^3} - 3$

$v(3) = \frac{-8}{(3)^3} - 3$