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15 b $(x - 2)(x^2 - 4x - 6) = 0$

$\therefore \quad x = 2 \quad$ or $\quad \dfrac{4 \pm \sqrt{16 - 4(1)(-6)}}{2} = \dfrac{4 \pm \sqrt{40}}{2}$

$\therefore \quad x = 2 \quad$ or $\quad 2 \pm \sqrt{10}$

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2 b $y = \dfrac{8}{x^2} \quad$ at $\quad x = 9$

$f(x) = 8x^{-2}$

$\therefore \quad f'(x) = -16x^{-3} = -\dfrac{16}{x^3}$

and so $\quad f'(9) = -\dfrac{16}{729}$

$\therefore \quad$ tangent has slope of $-\dfrac{16}{729}$