

1. Find dy if $y = x \csc(3x^2 - 1)$.
2. Find ds if $s = -16t^2 + 5t + 100$.
3. Find dx if $y = \frac{\sin 2x}{1 - \log_3 x^2}$.
4. Use differentials to approximate $(3.02)^2 - 4(3.02) + 2$.

