

Answer on Question # 53940 – Math – Calculus

Find the derivative of $f(x) =$ negative 9 divided by x at $x = -12$.

Solution

$$f(x) = \frac{-9}{x};$$

$$f'(x) = \left(\frac{-9}{x}\right)' = -9\left(\frac{1}{x}\right)' = -9 \cdot \frac{-1}{x^2} = \frac{9}{x^2};$$

$$f'(-12) = \frac{9}{(-12)^2} = \frac{9}{144} = \frac{1}{16}.$$

Answer: $f'(-12) = \frac{1}{16}$.