

Suppose that $f(x)$ and $g(x)$ are differentiable functions, and the following information is known about them:

$$f(2) = -3 \quad f'(2) = 5 \quad g(2) = 1 \quad g'(2) = 2 \quad g(0) = 2 \quad g'(0) = 4$$

1. If $F(x) = \frac{f(x)}{g(x)}$, compute $F(2)$ and $F'(2)$.
2. If $G(x) = x^3 f(x) - 7g(x)$, compute $G(2)$ and $G'(2)$.
3. If $H(x) = \frac{3 + e^x}{g(x)}$, compute $H(0)$ and $H'(0)$.