

Overall, the students did not perform as well in the category of knowledge and comprehension. They appear to have a general understanding of the underlying ideas of calculus, but sometimes they lose track of the details in their computation. Below is a student's response to a comprehension question where the student did not use the correct rule of differentiation.

7. Suppose that $F(x) = f(x)^2 + 1$, $f(1) = 1$, and $f'(1) = 3$. Find $F'(1)$.

(A) 3 (B) 4 (C) 5 (D) 6 (E) None of the above

7.) $F(x) = f(x)^2 + 1$ $f(1) = 1$ $f'(1) = 3$ $F'(1)$

$$F'(x) = 2f(x)$$
$$F'(1) = 2f(1)$$
$$= 2$$