PRINT your name _____

Remove everything from your desk except this page and a pencil or pen.
 Circle your answer. Show your work.
The quiz is worth 5 points.

Let $f(x) = 2x^2 + 3$. Find $\frac{f(a)-f(b)}{a-b}$ and simplify as much as possible.

Answer: We have

$$\frac{f(a) - f(b)}{a - b} = \frac{(2a^2 + 3) - (2b^2 + 3)}{a - b} = \frac{2a^2 - 2b^2}{a - b} = \frac{2(a + b)(a - b)}{a - b} = \boxed{2(a + b).}$$