

Quiz 4 MTH140 Fall 2026

Sunday, September 13, 2026

8:59 AM

$$f(x) = (2x+1)^2$$

$$f(2) = (2(2)+1)^2 = (4+1)^2 = 5^2 = 25$$

$$f(-3) = (2(-3)+1)^2 = (-6+1)^2 = (-5)^2 = (-5)(-5) = 25$$

$$\begin{aligned} f(5x-2) &= (2(5x-2)+1)^2 = (10x-4+1)^2 \\ &= (10x-3)^2 \\ &= (10x-3)(10x-3) \\ &= 100x^2 - 30x - 30x + 9 \\ &= 100x^2 - 60x + 9 \end{aligned}$$