

Quiz 4 MTH 140 Fall 2025

Thursday, September 4, 2025

11:08 AM

$$h(\phi) = (\phi + 2)^2 - \phi$$

Compute

$$h(2) = (2+2)^2 - 2 = 4^2 - 2 = 16 - 2 = 14$$

$$h(5) = (5+2)^2 - 2 = 7^2 - 2 = 49 - 2 = 47$$

$$h(x+1) = ((x+1)+2)^2 - (x+1)$$

$$= (x+3)^2 - x - 1$$

$$= x^2 + 6x + 9 - x - 1$$

$$= x^2 + 5x + 8$$