

**Problem Definition**

Problem 21. Use the General Power Rule to find the derivative of the function.

$$h(x) = (6x - x^3)^2$$

**Solution Step 1:**

Applying the power rule gives

$$\begin{aligned} h'(x) &= 2(6x - x^3) \frac{d}{dx}(6x - x^3) \\ &= 2(6x - x^3)(6 - 3x^2) \\ &= 6x(6 - x^2)(2 - x^2) \end{aligned}$$

where the solution has been simplified to obtain the solution in the book.