Worked Solutions

The Power Rule (Derivative Formula) Q. 7

differentiate: $y = (2x - 3)(x + 1)$

expanding the expression,

$$y = 2x^2 + 2x - 3x - 3$$

collecting terms,

$$y = 2x^2 - x - 3$$

applying the Power Rule:

$$\frac{d}{dx}[x^n] = nx^{n-1}$$

differentiating,

answer : $\dfrac{dy}{dx} = 4x - 1$