

Find each individual product and combine the like terms:

$$x(x^2) + x(3x) + x(5) + 4(x^2) + 4(3x) + 4(5)$$
$$= x^3 + 3x^2 + 5x + 4x^2 + 12x + 20 = x^3 + 7x^2 + 17x + 20$$