

HOMWORK - Quiz 2

① WRITE EACH NUMBER IN SCIENTIFIC NOTATION:

$$82,350,000 = 8.235 \times 10^7$$

$$0.000235 = 2.35 \times 10^{-4}$$

② PERFORM THE OPERATIONS. WRITE THE ANSWER IN SCIENTIFIC NOTATION

$$(2 \times 10^8)(3 \times 10^3) = (2 \cdot 3)(10^8 \cdot 10^3) = 6 \times 10^{11}$$

$$\frac{2.6 \times 10^{-3}}{2 \times 10^2} = \frac{2.6}{2} \cdot \frac{10^{-3}}{10^2} = 1.3 \times 10^{-3-2} = 1.3 \times 10^{-5}$$

③ SIMPLIFY

$$(x+7)(x-5) = x^2 - 5x + 7x - 35 = x^2 + 2x - 35$$

$$x(2x-5)(x+3) = (2x^2-5x)(x+3) = 2x^3 + 6x^2 - 5x^2 - 15x = 2x^3 + x^2 - 15x$$

$$\begin{aligned} 7(4m-3)(2m+1) &= 7(8m^2 + 4m - 6m - 3) \\ &= 7(8m^2 - 2m - 3) \\ &= 56m^2 - 14m - 21 \end{aligned}$$