

Regroup: $(5.2 \times 6.5)(10^{15} \times 10^{-8})$

Multiply the numbers: $(33.8)(10^{15} \times 10^{-8})$

Use the product rule: $33.8 \times 10^{15+(-8)} = 33.8 \times 10^7$

Convert 33.8 into scientific notation: $(3.38 \times 10^1) \times 10^7$

Regroup and use the product rule: $3.38 \times (10^1 \times 10^7) = 3.38 \times 10^{1+7} = 3.38 \times 10^8$