

Convert 4.5×10^6 kilometers to micrometers.

Solution:

$$1 \text{ km} = 10^3 \text{ m}$$

$$1 \mu\text{m (micrometer)} = 10^{-6} \text{ m}$$

Thus:

$$4.5 \times 10^6 \text{ km} = 4.5 \times 10^6 \times 10^3 \text{ m} = 4.5 \times 10^6 \times 10^3 \times 10^{-6} \mu\text{m} = 4.5 \times 10^{15} \mu\text{m}$$

Answer: 4.5×10^{15} micrometers