Topic: Scientific notation

Question: Write $523{,}000{,}000$ in scientific notation.

Answer choices:

A 523×10^6

B 5.23×10^8

C 52.3×10^7

D 0.523×10^9

Solution: B

To put the number in proper scientific notation, we need to make sure we have only one digit to the left of the decimal point. In order to do that, we have to move the decimal point 8 places to the left, which means that the exponent (in the power of 10 written in exponential form) will be 8.

$$523{,}000{,}000$$

$$5.23 \times 10^8$$

Topic: Scientific notation

Question: Write 0.000569 in scientific notation.

Answer choices:

A 56.9×10^{-5}

B 5.69×10^{4}

C 0.569×10^{-3}

D 5.69×10^{-4}

Solution: D

To put the number in proper scientific notation, we need to make sure we have only one digit to the left of the decimal point. In order to do that, we have to move the decimal point 4 places to the right, which means the exponent (in the power of 10 written in exponential form) will be -4.

$$0.000569$$

$$5.69 \times 10^{-4}$$

Topic: Scientific notation

Question: Write $2{,}000$ in scientific notation.

Answer choices:

A 0.2×10^4

B 0.2×10^3

C 2×10^3

D 2×10^4

Solution: C

To put the number in proper scientific notation, we need to make sure we have only one digit to the left of the decimal point. In order to do that, we have to move the decimal point 3 places to the left, which means that we get

$$2{,}000$$

$$2 \times 10^3$$