

Objective #17

WP: Scientific notation (Page 1 of 2)

1. The number of CDs sold by one company in 1983 was approximately 2.2×10^6 . The number of CDs sold by the same company in 1989 was approximately 8.5×10^7 . How many more CDs were sold in 1989 than in 1983?

[A] 82,800,000 [B] 13,500,000 [C] 8,280,000 [D] 1,350,000

1983 2,200,000

1989 85,000,000

How much more is this?

$$\begin{array}{r} 850000000 \\ - 22000000 \\ \hline 828000000 \end{array}$$

2. Last year a large trucking company delivered about 0.7 million tons of goods at an average value of \$17,500 per ton. What was the total value of goods delivered?

[A] $\$7.0 \times 10^{10}$ [B] $\$12.25 \times 10^9$ [C] $\$1.225 \times 10^{10}$ [D] $\$70.0 \times 10^9$

Important info: 0.7 million tons
\$17,500 per ton

$$1.225 \times 10^{10}$$

0.7 million = 700,000 tons

each of these is worth \$17,500

⇒ Multiply to get total value

$$\begin{array}{r} 70,000 \\ \times 17,500 \\ \hline \end{array}$$

or

$$\begin{array}{r} 7 \times 10^5 \\ \times 1.75 \times 10^4 \\ \hline \end{array}$$

$$12.25 \times 10^9$$

Scientific notation!
NO!