

8.EE.A.4 Solve Scientific Notations Problems

8.EE.A.4 Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used.

- Last year a large trucking company delivered about 5 million loads of goods at an average value of \$12,500 per load. What was the total value of goods delivered? Express your answer in scientific notation.

[A] $\$50.0 \times 10^{10}$ [B] $\$62.5 \times 10^9$ [C] $\$5.0 \times 10^{11}$ [D] $\$6.25 \times 10^{10}$
- In 1993, Argentina produced about 2.76×10^4 passenger cars. That same year, Canada produced about 3.5 times as many passenger cars as Argentina. About how many cars did Canada produce? Write your answer in scientific notation.
- In 1994, the population of Panama was about 3.358×10^6 . That same year, the population of Portugal was twice the population of Panama. What was the approximate population of Portugal in 1994? Write your answer in scientific notation.
- In a certain country, the population is 1.1 million. 27,500 people have formed a new political party. If a person is picked at random from the country, what is the probability that the person belongs to the party? Express your answer in scientific notation.
- Compare the quantities in Column A and Column B.

<u>Column A</u>	<u>Column B</u>
the value of $2 \cdot (4 \times 10^3)$	the value of $4 \cdot (2 \times 10^4)$

[A] The quantity in Column A is greater. [B] The quantity in Column B is greater.

[C] The quantities are equal.

[D] The relationship cannot be determined from the information given.

8.EE.A.4 Solve Scientific Notations Problems

Answer Key

8.EE.A.4 Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used.

[1] D _____

[2] 9.66×10^4 _____

[3] 6.716×10^6 _____

[4] 2.50×10^{-2} _____

[5] B _____