

Chapter Review/Test

Concepts and Skills

Tell whether each number is written correctly in scientific notation. If incorrectly written, state the reason.

- 1 $10 \cdot 10^2$ Incorrect; Coefficient $\nless 10$ 2 $0.99 \cdot 10^{12}$ Incorrect; Coefficient $\nless 1$
3 $1.4 \cdot 10^2$ Correct 4 $0.4 \cdot 10^{25}$ Incorrect; Coefficient $\nless 1$

Write each number in scientific notation.

- 5 714,000 $7.14 \cdot 10^5$ 6 0.00087 $8.7 \cdot 10^{-4}$

Write each number in standard form.

- 7 $3.46 \cdot 10^2$ 346 8 $5.4 \cdot 10^4$ 54,000

Evaluate. Write your answer in scientific notation. Round the coefficient to the nearest tenth.

- 13 $2.44 \cdot 10^3 + 1.9 \cdot 10^5$ $1.9 \cdot 10^5$ 14 $3.12 \cdot 10^{-3} - 3 \cdot 10^{-3}$ $1.2 \cdot 10^{-4}$
15 $2.4 \cdot 10^{-2} \cdot 5 \cdot 10^{-1}$ $1.2 \cdot 10^{-2}$ 16 $3.2 \cdot 10^8 \div (1.6 \cdot 10^4)$ $2 \cdot 10^4$