

Name: _____

Independent Practice 2.3 Multiplying in Scientific Notation

Complete.

1. An *E. coli* bacterium has a surface that measures about $4 \cdot 10^{-3}$ millimeter in length and $2.3 \cdot 10^{-3}$ millimeter in width. Find the approximate surface area of an *E. coli* bacterium.

Approximate surface area of *E. coli* bacterium

Evaluate each expression. Write your answer in scientific notation and round the coefficient to the nearest tenth.

2. $5.8 \cdot 10^5 \cdot 1.5 \cdot 10^2$

3. $8.25 \cdot 10^{-6} \cdot 7.8 \cdot 10^8$

Solve. Write your answer in scientific notation and round the coefficient to the nearest tenth.

4. The dimensions of a rectangular-shaped sandpit measures about $2.75 \cdot 10^2$ centimeters long by $9 \cdot 10^2$ centimeters wide. Find the approximate area of the sandpit.

5. A square foundation for a park measures $2.3 \cdot 10^2$ yards in length. Find the approximate area of the foundation.