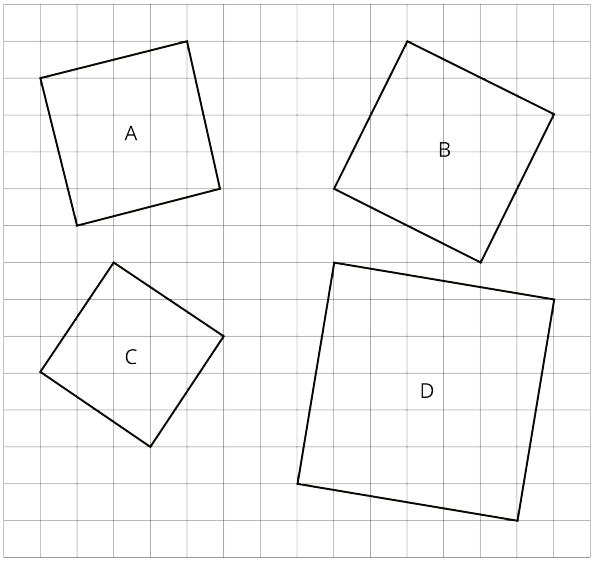
Lesson 1 Practice Problems

1. Find the area of each square. Each grid square represents 1 square unit.



2. Find the length of a side of a square if its area is:

   a. 81 square inches

   b. $\frac{4}{25}$ cm^2

   c. 0.49 square units

   d. m^2 square units

3. Find the area of a square if its side length is:

a. 3 inches

b. 7 units

c. 100 cm

d. 40 inches

e. x units

4. Evaluate $(3.1 \times 10^4) \cdot (2 \times 10^6)$. Choose the correct answer:

A. 5.1×10^{10}

B. 5.1×10^{24}

C. 6.2×10^{10}

D. 6.2×10^{24}

(From Unit 7, Lesson 13.)

5. Noah reads the problem, "Evaluate each expression, giving the answer in scientific notation." The first problem part is: $5.4 \times 10^5 + 2.3 \times 10^4$.

   Noah says, "I can rewrite 5.4×10^5 as 54×10^4. Now I can add the numbers: $54 \times 10^4 + 2.3 \times 10^4 = 56.3 \times 10^4$."

   Do you agree with Noah's solution to the problem? Explain your reasoning.

   (From Unit 7, Lesson 14.)

6. Select **all** the expressions that are equivalent to 3^8.

   A. $(3^2)^4$

   B. 8^3

   C. $3 \cdot 3 \cdot 3 \cdot 3 \cdot 3 \cdot 3 \cdot 3 \cdot 3$

   D. $(3^4)^2$

   E. $\frac{3^6}{3^{-2}}$

   F. $3^6 \cdot 10^2$

   (From Unit 7, Lesson 6.)