

Lesson 2 Practice Problems

1. A square has an area of 81 square feet. Select **all** the expressions that equal the side length of this square, in feet.

A. $\frac{81}{2}$

B. $\sqrt{81}$

C. 9

D. $\sqrt{9}$

E. 3

2. Write the exact value of the side length, in units, of a square whose area in square units is:

a. 36

b. 37

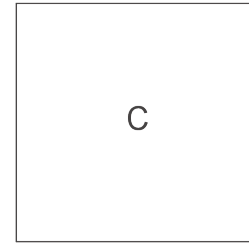
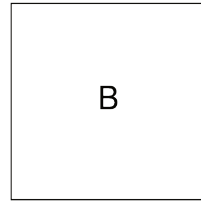
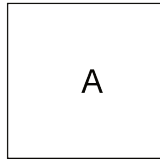
c. $\frac{100}{9}$

d. $\frac{2}{5}$

e. 0.0001

f. 0.11

3. Square A is smaller than Square B. Square B is smaller than Square C.



The three squares' side lengths are $\sqrt{26}$, 4.2, and $\sqrt{11}$.

What is the side length of Square A? Square B? Square C? Explain how you know.

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

a. $\frac{1}{5}$ cm

b. $\frac{3}{7}$ units

c. $\frac{11}{8}$ inches

d. 0.1 meters

e. 3.5 cm

(From Unit 8, Lesson 1.)

5. Here is a table showing the areas of the seven largest countries.

- a. How much larger is Russia than Canada?

- b. The Asian countries on this list are Russia, China, and India. The American countries are Canada, the United States, and Brazil. Which has the greater total area: the three Asian countries, or the three American countries?

country	area (in km^2)
Russia	1.71×10^7
Canada	9.98×10^6
China	9.60×10^6
United States	9.53×10^6
Brazil	8.52×10^6
Australia	6.79×10^6
India	3.29×10^6

(From Unit 7, Lesson 14.)

6. Select **all** the expressions that are equivalent to 10^{-6} .

- A. $\frac{1}{1000000}$
- B. $\frac{-1}{1000000}$
- C. $\frac{1}{10^6}$
- D. $10^8 \cdot 10^{-2}$
- E. $\left(\frac{1}{10}\right)^6$
- F. $\frac{1}{10 \cdot 10 \cdot 10 \cdot 10 \cdot 10 \cdot 10}$

(From Unit 7, Lesson 5.)