

## 2.3 Learning Opportunity

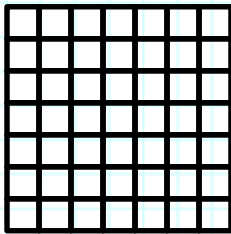
### Perfect Squares and Square Roots



Name: \_\_\_\_\_

- 1) Draw a model that represents both of these equations:  $6^2 = 36$  and  $\sqrt{36} = 6$ .

- 2) Write two equations to represent the model shown below.



Simplify each of the following:

3)  $\sqrt{100}$

4)  $\sqrt{64}$

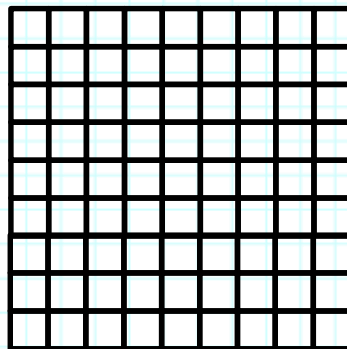
5)  $9^2$

6)  $12^2$

- 7) The floor of Ariel's patio is the shape of a square. To tile the patio floor, Ariel determined she needed 225 square tiles that each measure one foot on a side. What are the dimensions of the patio floor?

8) Chloe correctly drew the model below to represent an equation. Which of the following could NOT be the equation Chloe was modeling?

- A)  $9 \cdot 9 = 81$
- B)  $9 \cdot 4 = 36$
- C)  $\sqrt{81} = 9$
- D)  $9^2 = 81$



9) The model below represents a city block in Gavin's neighborhood. Each day, Gavin exercises by jogging around the block several times. In the model, each small yellow square represents an area of 400 square feet. How many feet will Gavin have jogged after one complete lap around the block?

