

2.2 Learning Opportunity

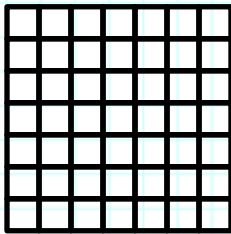
Perfect Squares and Square Roots



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) $\sqrt{64}$

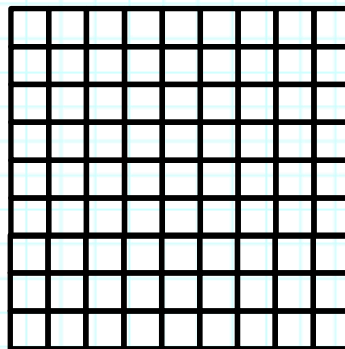
5) 9^2

6) 12^2

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

8) Georgina correctly drew the model below to represent an equation. Which of the following could **NOT** be the equation Georgina 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 Thomas' neighborhood. Each day, Thomas 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 Thomas have jogged after one complete lap around the block?

