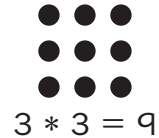


Exploring Square Numbers

A **square number** is a number that can be written as the product of a number multiplied by itself. For example, the square number 9 can be written as $3 * 3$.



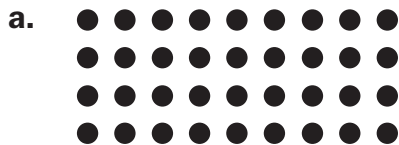
- ① Fill in the missing factors and square numbers.

| Factors | Square Number |
|---------|---------------|
| | 4 |
| $3 * 3$ | 9 |
| $4 * 4$ | |
| | 25 |
| | 36 |

- ② What pattern(s) do you see in the factors? In the products?

- ③ What other pattern(s) do you see in the table?

- ④ Write an equation to describe each array.



Equation: _____



Equation: _____

- ⑤ a. Which of the arrays above shows a square number? _____
 b. Explain. _____

Practice

- ⑥ 32, 45, 58, _____, _____, _____

Rule: _____

- ⑦ _____, _____, _____, 89, 115, 141

Rule: _____