

# Investigating Why the Pattern Works

Complete the number sentences.

1

$$25 \times 25 = \boxed{625}$$

$$26 \times 24 = \boxed{\phantom{000}} = \underline{625} - 1$$

$$27 \times 23 = \boxed{\phantom{000}} = \underline{\phantom{000}} - \underline{\phantom{000}}$$

$$28 \times 22 = \boxed{\phantom{000}} = \underline{\phantom{000}} - \underline{\phantom{000}}$$

$$29 \times 21 = \boxed{\phantom{000}} = \underline{\phantom{000}} - \underline{\phantom{000}}$$

2

$$40 \times 40 = \boxed{\phantom{000}}$$

$$41 \times 39 = \boxed{\phantom{000}} = \underline{\phantom{000}} - \underline{\phantom{000}}$$

$$42 \times 38 = \boxed{\phantom{000}} = \underline{\phantom{000}} - \underline{\phantom{000}}$$

$$43 \times 37 = \boxed{\phantom{000}} = \underline{\phantom{000}} - \underline{\phantom{000}}$$

$$44 \times 36 = \boxed{\phantom{000}} = \underline{\phantom{000}} - \underline{\phantom{000}}$$

Use a square number fact to help you to complete the number sentences.

$$\textcircled{3} \quad 29 \times 31 = \underline{\phantom{000}}$$

$$\textcircled{4} \quad 46 \times 54 = \underline{\phantom{000}}$$

$$\textcircled{5} \quad 52 \times 48 = \underline{\phantom{000}}$$

$$\textcircled{6} \quad 63 \times 57 = \underline{\phantom{000}}$$