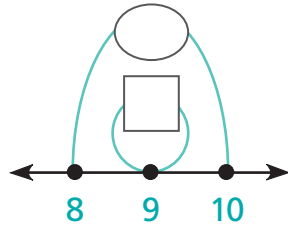


Discovering a Useful Multiplication Pattern

NCTM Standards 1, 2, 7, 9, 10

Complete the diagrams and number sentences.

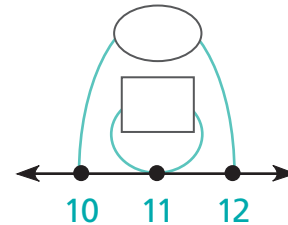
1



$$9 \times 9 = \square$$

$$8 \times 10 = \bigcirc$$

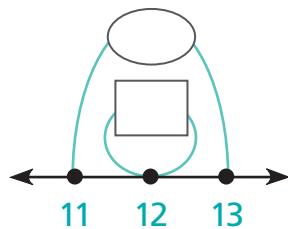
2



$$11 \times 11 = \square$$

$$10 \times 12 = \bigcirc$$

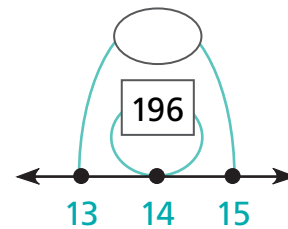
3



$$12 \times 12 = \square$$

$$11 \times 13 = \bigcirc$$

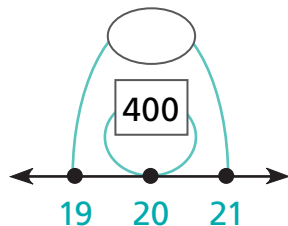
4



$$14 \times 14 = \square$$

$$13 \times 15 = \bigcirc$$

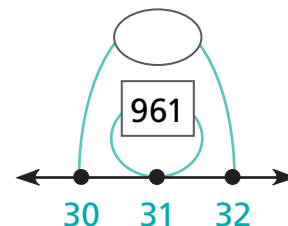
5



$$20 \times 20 = \square$$

$$\underline{\quad} \times \underline{\quad} = \bigcirc$$

6



$$\underline{\quad} \times \underline{\quad} = \square$$

$$\underline{\quad} \times \underline{\quad} = \bigcirc$$

Complete the related number sentences.

7 $25 \times 25 = \boxed{625}$
 $24 \times 26 = \bigcirc$

8 $30 \times 30 = \boxed{900}$
 $29 \times 31 = \bigcirc$

9 $41 \times 41 = \boxed{1,681}$
 $42 \times 40 = \bigcirc$

10 $53 \times 53 = \boxed{2,809}$
 $\underline{\quad} \times \underline{\quad} = \bigcirc 2,808$

Complete the tables by filling in the white boxes.

11

×	4	5	6	7
4	16			
5		25		
6			36	
7				49

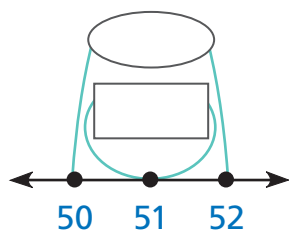
12

×	15	16	17	18
15	225			
16		256		
17			289	
18				324

13

×	27	28	29	30
27	729			
28		784		
29			841	
30				900

14 **Challenge** Complete the diagram and related sentence.



$50 \times 52 = \bigcirc$
 $51 \times 51 = \square$