

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Write the products as fast as you can into the chart.

×	1	2	3	4	5	6	7	8
1								
2								
3								
4								
5								
6								
7								
8								

- Color the rows and columns with even factors yellow.
- What do you notice about the factors and products that are left unshaded?
- Complete the chart below by filling in each blank and writing an example for the each rule.

Rule	Example
odd times odd equals _____	
even times even equals _____	
even times odd equals _____	

- d. Explain how  $7 \times 6 = (5 \times 6) + (2 \times 6)$  is shown in the table.
- e. Use what you know to find the product of  $4 \times 16$  or 8 fours + 8 fours.
2. In the lesson, we found that  $n \times n$  is the sum of the first  $n$  odd numbers. Use this pattern to find the value of  $n$  for each equation below. The first is done for you.
- a.  $1 + 3 + 5 = n \times n$
- $9 = 3 \times 3$**
- b.  $1 + 3 + 5 + 7 = n \times n$
- c.  $1 + 3 + 5 + 7 + 9 + 11 = n \times n$
- d.  $1 + 3 + 5 + 7 + 9 + 11 + 13 + 17 = n \times n$
- e.  $1 + 3 + 5 + 7 + 9 + 11 + 13 + 15 + 19 + 21 = n \times n$