Name _____ Date _____

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

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

b. Color the rows and columns with even factors yellow.

c. What do you notice about the factors and products that are left unshaded?

d. Complete the chart below by filling in each blank and writing an example for each rule.

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

e. Explain how $7 \times 6 = (5 \times 6) + (2 \times 6)$ is shown in the table.

f. Use what you know to find the product of 4×16 or 8 fours + 8 fours.

2. Today in class, 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. $1 + 3 + 5 + 7 + 9 + 11 + 13 + 15 = n \times n$

e. $1 + 3 + 5 + 7 + 9 + 11 + 13 + 15 + 17 + 19 = n \times n$

Answer Key

1. a. Products accurately recorded
   b. Even factors accurately identified
   c. Explanations may vary.
   d. Odd; even; even; examples will vary.
   e. Explanations may vary.
   f. Answers will vary.
2. a. Answer provided
   b. $16 = 4 \times 4$
   c. $36 = 6 \times 6$
   d. $64 = 8 \times 8$
   e. $100 = 10 \times 10$