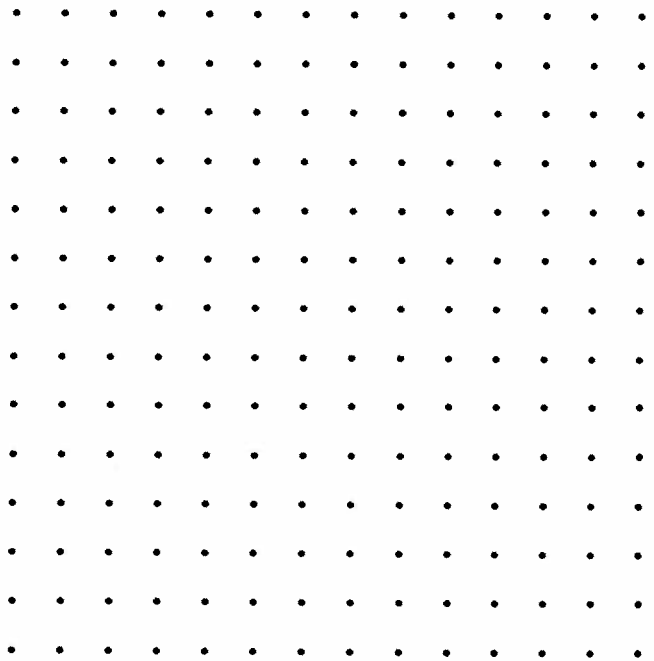


Unit 1 Review Packet

Name _____

Date _____

1. Mr. Martin has 28 tulip bulbs. He wants to plant them in a rectangular array consisting of *at least 2* rows with *at least 2* tulips in each row. On the grid at the right, draw three possible arrays.



2. Is 28 an even or an odd number?

3. List all the factors of 28.

4. Is 28 a prime or composite number?

How can you tell? _____

5. Circle the factors in Problem 3 that are prime numbers.

6. Write the prime factorization for 28. _____

7. Write the prime factorization for 28 using exponents. _____

8. Fill in the missing numbers.

a. $6^2 =$ _____

b. $4^3 =$ _____

c. _____ $= 8^2$

d. _____ $^2 = 9$

9. Write three examples of each of the following types of numbers:

a. Prime: _____

b. Composite: _____

c. Even: _____

d. Odd: _____

e. Square: _____

10. Name a number between 200 and 300 that is divisible by 3 but not by 2. _____

11. Name a number between 200 and 300 that is divisible by 2, 3, and 5. _____

12. List the factors of 16: _____

13. List the first 10 multiples of 6:

14. Solve. $\sqrt{100^2} =$ _____

15. Solve. $\sqrt{987654321^2} =$ _____

16. Solve.

$$\begin{array}{r} 8 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 8 \\ \hline \end{array}$$

How are we doing?

1. Draw 3 possible arrays for 18.

2. List the factors for the following numbers:

- a. 12 -
- b. 24 -
- c. 36 -

3. Identify the following numbers as prime or composite.

7 = _____ 16 = _____ 11 = _____
 12 = _____ 27 = _____ 33 = _____

4. Fill in the answers:

$3^2 =$ _____ $10^2 =$ _____ $5^2 =$ _____ $9^2 =$ _____

5. Create a number that has 3 digits that is divisible by 3, but not by 2. _____

6. Is 441 prime or composite? Explain.

Factor Rainbows: List all factors of each number.

24
 1, 2, 3, 4, 6, 8, 12, 24

12	18	48
10	32	50
40	72	100
20		
8		

Review

Name: _____

Math

DIRECTIONS: USE DIVISIBILITY TO CHECK WHETHER THE FOLLOWING NUMBERS ARE DIVISIBLE BY 2, 3, 5, 6, 9, OR 10.

All even numbers are **divisible by 2**.

A number is **divisible by 10** if it ends in 0.

A number is **divisible by 5** if it ends in 0 or 5.

A number is **divisible by 3** if the sum of its digits is divisible by 3.

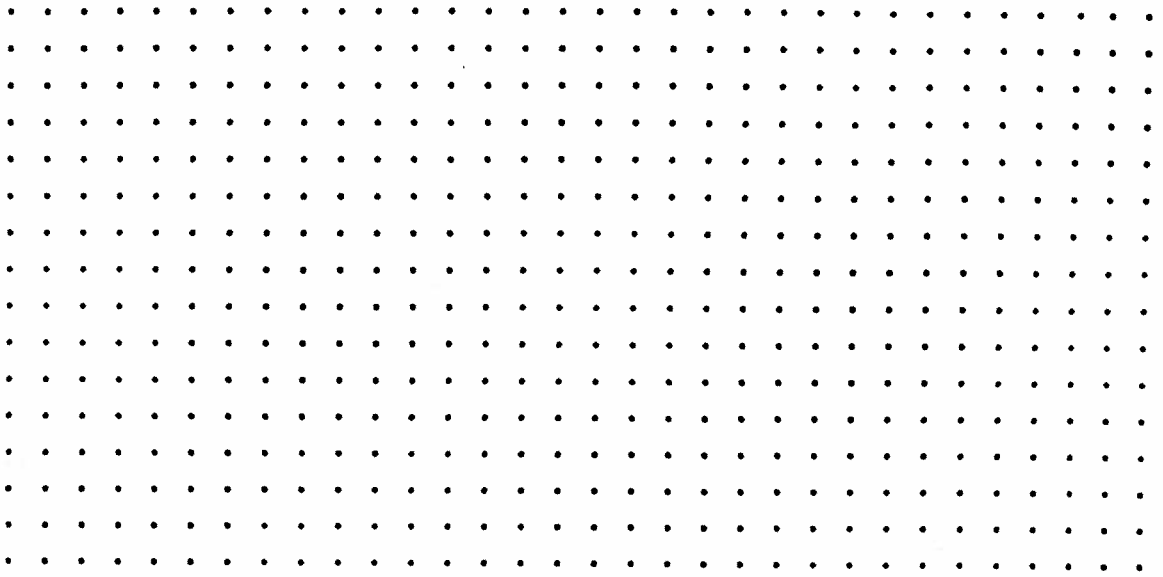
A number is **divisible by 9** if the sum of its digits is divisible by 9.

A number is **divisible by 6** if it is also divisible by BOTH 2 and 3.

Number	Divisible by:					
	2	3	5	6	9	10
36						
993						
93,270						
1,632,721						

Number Theory

1. Draw as many different rectangular arrays as you can using 16 objects.



2. a. Name all of the factors of 28. _____
b. Name all of the factors of 18. _____
c. Name all of the factors of 17. _____
3. a. Name two numbers that are divisible by 2 and 9. _____
b. Name two numbers that are divisible by 3 and 5. _____
c. Name a number that is divisible by 3, 5, and 9. _____
4. a. Circle the square numbers in this list: 7 22 9 36 12 225
b. How do you know that they are square numbers?

5. Explain why you agree or disagree with the following statement: It is not possible for a number to be a square number and a composite number.

