Lesson # 17

Divisibility

Date

Warmup

1. 475 students go to lunch at the same time. Each table seats 5 children. Will there be any tables with less than 5 students (assume that all students are present)?

2. The eighth grade students in River Oaks County Schools are taking a trip to Tennessee. The adult leaders separated the 237 students into groups of 3. How many groups of 3 are there? How any children are left over?

There are _____ groups of 3
There are _____ students left over.

3. A company produces 34,821 pencils each day. Each box holds 9 pencils. After filling as many boxes as possible, will there be left over pencils to box the following day?

4. Solve for x:

$x - 4.73 = 10.77$ *Check*

I. Divisibility

Is 64 divisible by:

2? _____ 3? _____ 4?_____
5?_____ 6?_____ 7?_____
8?_____ 9?_____ 10?_____

A number is divisible by an amount if it goes in evenly, no remainder.

5. Is 68 divisible by:

2? _____ 3? _____ 4?_____

5?_____ 6?_____ 7?_____

8?_____ 9?_____ 10?_____

6.

7.

Divisibility Rules:

Divisible By	Rule
2	The last digit is 0,2,4,6,8
3	The sum of the digits is divisible by 3
4	The last two digits are divisible by 4
5	The last digit is 0 or 5
6	The number is divisible by 2 and 3
7	There is no simple test, divide the number by 7.
8	The last three digits are divisible by 8
9	The sum of the digits is divisible by 9
10	The last digit is 0

8.

9.

11. (Use the divisibility tests, you can check by division)

II. Using the Divisibility Tests with Large Numbers

Is 154,879,064 divisible by:

2? _____

3? _____

4?_____

5?_____

6?_____

7?_____

8?_____

9?_____

10?_____

12. Is _____ divisible by:

2? _____

3? _____

4?_____

5?_____

6?_____

7?_____

8?_____

9?_____

10?_____

III. Practice

13	14

15	16
17	18
19	20
21	22
23	24

25	26
27	28
29	30