

Warmup

1. A company produces 34529 mugs each day. Each box holds 9 mugs. After filling as many boxes as possible, will there be left over mugs to box the following day?

I. Divisibility

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

Is 72 divisible by:

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

2. Is 90 divisible by:

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

3.

4.

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

5.

6.

7.

Factor: Factors are the numbers multiplied by each other to get a product.

Factors of 8: 1 and 8 because $(1)(8) = 8$
2 and 4 because $(2)(4) = 8$

factor
X factor
product

factor
X factor
product

What are the factors of 16?

What are the factors of 29?

9. What are the factors of 35?

10. What are the factors of 88?

11. List the factors of 100.