

Lesson 3-1 Divisibility and Mental Math

SWBAT: Check for divisibility using mental math and use divisibility to solve problems.

Vocab:

Odd numbers: _____.

Even numbers: _____.

Divisibility:

When dividing whole numbers you will not _____ if the numbers are divisible. Use _____ when checking for divisibility.

- Is 56 divisible by 7?
- Is 56 divisible by 4?
- Is 56 divisible by 6?
- Is 56 divisible by 3?

Divisibility rules:

There are rules for divisibility for these numbers: 2, 3, 5, 9, 10

A whole number is divisible by...

- 2, if _____
- 3, if _____
- 5, if _____
- 9, if _____
- 10, if _____

Test 715 for divisibility by 2, 3, 5, 9, 10

- 2, no because it is not _____
- 3, _____ because $7 + 1 + 5 = 13$ and 13 is not divisible by 3
- 5, _____ because it ends in _____
- 9, no because _____ is not divisible by 9
- 10, no because it does not end in _____

Test each of the following numbers for divisibility by 2, 3, 5, 9, 10

- ① 150 ② 1,021 ③ 2,122

Challenge: Find all the even numbers between 1,000 and 2,000 that are divisible by both 5 and 9 (hint: there are 11 numbers)