Section 8.R.1 Tests for Divisibility

Go to Section 8.R.1 Learn mode in Hawkes to follow along!

Tests for Divisibility

Divisibility

If a number can be divided by another number so that the remainder is 0, then we say

1. the number is _____
2. the divisor _____

Divisibility by 2

A number is divisible by 2 (is an **even number**) if _____

Divisibility by 3

A number is divisible by 3 if _____

Divisibility by 4

A number is divisible by 4 if _____

Divisibility by 5

A number is divisible by 5 if _____

Divisibility by 6

A number is divisible by 6 if _____

Divisibility by 9

A number is divisible by 9 if _____

Divisibility by 10

A number is divisible by 10 if _____

Example 3 Divisibility by 4

Determine whether each of the following numbers is divisible by 4.

a. 9036 **b.** 6700 **c.** 15,031

Solution

Example 6 Divisibility by 9

Determine whether each of the following numbers is divisible by 9.

a. 2530 **b.** 873

Solution

Exercises

Using the tests for divisibility, determine which of 2, 3, 4, 5, 6, 9, and 10 (if any) will divide exactly into each given number.

1. 571

2. 732

3. 9000

4. 10,000

5. 12,324

6. 75,495

For each set of numbers, make up any four 3-digit numbers that you can think of that are divisible by all of the given numbers. (There are many possible answers.)

7. 2 and 3

8. 2, 3, and 10