DIVISIBILITY RULES

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- The following rules will help you determine if a number is divisible by another number.

- Divisible means to divide into evenly.

A number is divisible by 2 if:

- it is an even number.
- An even number ends with 0,2,4,6,8.
- Example:

    496- ends with an even number.

    496 *is* divisible by 2.

A number is divisible by 5 if:

- the ones digit is 0 or 5.
- Example #1:

    680 – ends with a 0

    680 *is* divisible by 5.

- Example #2:

    965 – ends with a 5

    965 *is* divisible by 5.

A number is divisible by 10 if:

- the ones digit is a 0.

- Example:

$$950 - \text{ends with a } 0$$

$$950 \; is \; \text{divisible by } 10.$$

A number is divisible by 3 if:

- the sum of the digits is divisible by 3.

- Example:

$$861: \quad 8 + 6 + 1 = 15$$

$$\underline{and} \; 15 \div 3 = 5$$

861 *is* divisible by 3

A number is divisible by 9 if:

- the sum of the digits is divisible by 9.

- Example:
  837: $8 + 3 + 7 = 18$

  and $18 \div 9 = 2$

  837 _is_ divisible by 9

A number is divisible by 6 if:

- it is even *AND* it is divisible by 3.
- Example:

864 - it is even *AND*

$8 + 6 + 4 = 18$

and $18 \div 3 = 6$

864 – *is* divisible by 6