

# NUMBER RELATIONSHIPS & DIVISIBILITY

When a number is **divisible** by another number that means the first number can be evenly divided by the second number.

**FACT:** A multiple of a number is divisible by that number.

EX: 42 → 42 is a multiple of 7  
42 is divisible by 7

**FACT:** A number is divisible by its factors.

EX: 100 → 25 is a factor of 100  
100 is divisible by 25

## *Divisibility Rules*

Certain rules can help you quickly figure out if a multi-digit number is divisible by a given digit.

STRATEGIES

**check the ones place**

{ divisible by 2 – if the number is **even**  
divisible by 5 – if the number has a **0 or 5 in the ones place**  
divisible by 10 – if the number has a **0 in the ones place**

**add up the digits**

{ divisible by 3 – if the **digits** in the number **add to a multiple of 3**  
divisible by 9 – if the **digits** in the number **add to a multiple of 9**