

Definitions:

1. Having your thumbs in the same spot indicates same sign.
  - a. **Same Spot**  $\Leftrightarrow$  **Same Sign**
2. Having your thumbs in a different spot indicates different sign.
  - a. **Different Spot**  $\Leftrightarrow$  **Different Sign**

**Begin Here**

For any math operation, start with thumbs in this **spot**:

Left thumb: vertical.

Right thumb: horizontal.



**Multiplication and Division**

CASE 1: Numbers have **Same Sign**.

- Keep thumbs in **Same Spot**.
- See thumbs for resulting “+” sign.



CASE 2: Numbers have **Different Sign**.

- Move left thumb down so that thumbs are in a **Different Spot**.
- See right thumb for resulting “-” sign.



## Addition and Subtraction

CASE 1: Numbers have **Same Sign**.

- Keep thumbs in **Same Spot**.
- See thumbs for resulting “+” operation.
- The “+” indicates addition.
- **Add** numbers and keep **Same Sign**.



CASE 2: Numbers have **Different Sign**.

- Move left thumb down so that thumbs are in a **Different Spot**.
- See right thumb for resulting “-” operation.
- The “-” indicates subtraction.
- **Subtract** numbers and use sign of **bigger** number.
  - Bigger “wins”.

