

# Adding & Subtracting Integers

## ADDITION

**Same Signs:** Add the numbers and keep the original sign.

$$(+ ) + (+ ) = (+ )$$

$$(- ) + (- ) = (- )$$

**Different Signs:** Subtract the smaller from the larger; keep the sign of the larger value.

$$-10 + 4 = -6$$

$$10 + (-4) = 6$$

## SUBTRACTION

**The Rule:** Change to addition by adding the opposite (Keep, Change, Change).

$$a - b \rightarrow a + (-b)$$

$$a - (-b) \rightarrow a + b$$

*Example:  $5 - (-3)$  becomes  $5 + 3 = 8$*

*Example:  $-2 - 4$  becomes  $-2 + (-4) = -6$*

## QUICK REFERENCE SUMMARY

<b>Operation</b>	<b>Signs</b>	<b>Action</b>
Addition	Same	Add & Keep Sign
Addition	Different	Subtract & Take Larger Sign
Subtraction	Any	Add the Opposite