

ADDING & SUBTRACTING INTEGERS

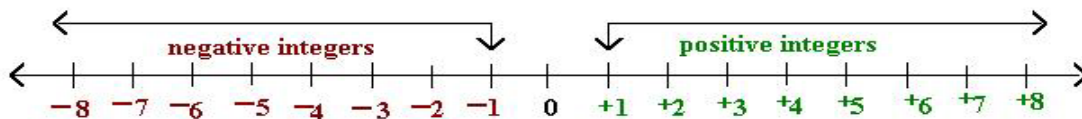
VOCABULARY:

Integers	the set of whole numbers (no decimals) that include _____ numbers, _____ numbers, and _____
Positive Integer	Any integer that is greater (bigger) than zero Examples:
Negative Integer	Any integer that is less than (smaller) zero Examples:

COMPARING THE VALUE OF INTEGERS

When comparing integers, we can use a number line. The further a number is to the right the greater it's value

- Positive integers are greater than negative integers



EXAMPLES:

i) Which is greater:

a) -6 or 6

b) 18 or 9

c) -2 or -5

ii) Rank these numbers from smallest to largest: -5, 10, 1, -7, 0, -8, 21, -18

WHAT WILL ADDING INTEGERS LOOK LIKE?

- Sometimes expressions will involve brackets. Why are brackets used in these situations?
- If there are two operations/signs beside each other, separated by only a bracket, we can eliminate the bracket by combining the signs

If signs are the same:	
- combine signs into a +	
$2 + (+3) =$	$4 - (-4) =$

If signs are different:	
- Combine signs into a -	
$4 - (+5) =$	$-8 + (-2)$

Examples

i) $2 - (-8)$


ii) $(+3) + (-2)$

iii) $(3) - (+3)$

iv) $(-4) - (+5)$

Strategies for adding and subtracting integers

$-6 + (-2)$

Number Line	Number Tiles	Calculator
		

a) $-2 + 4$

b) $-4 + (-7)$

c) $5 + (-3) + 2$

d) $-6 + 3 + (-3)$

e) $-5 + (-4) + 7$

f) $7 + (-6) + 3$

g) $3 - (-5)$

h) $-9 - (+3)$

i) $9 - (-4) + (-12)$

j) $-8 + 5 - 7 + 5$