

Negative Manipulation Rules

The answer always has two parts:

1) Sign

2) Number

Addition and Subtraction	Multiplication and Division
<p>A) If the two numbers have the same sign</p> <p>1) Sign in the answer is the sign of the two numbers</p> <p>2) Number in the answer is adding the two numbers after ignoring the sign</p> <p>Example: $+ 4 + 5$</p> <p>1) Sign of both numbers is $+$ so sign of answer is $+$</p> <p>2) Number in the answer is adding the two numbers after ignoring the $+$: $4 + 5 = 9$</p> <p>Answer: $+ 9$</p> <p>Example: $- 4 - 5$</p> <p>1) Sign of both numbers is $-$ so sign of answer is $-$</p> <p>2) Number in the answer is adding the two numbers after ignoring the $-$: $4 + 5 = 9$</p> <p>Answer: $- 9$</p> <p>B) Different sign in two numbers:</p> <p>1) Sign in the answer is the sign of the bigger number when the signs are not considered</p>	<p>A) If the two numbers have the same sign</p> <p>1) Sign: always a $+$</p> <p>2) Number: Multiply the two numbers as usual after ignoring the signs</p> <p>Example: 4×5</p> <p>1) Sign: always a $+$</p> <p>2) Number: Multiply 4 and 5 after ignoring the $+$ sign in both numbers: $4 \times 5 = 20$</p> <p>Answer: $+ 20$</p> <p>Example: $- 4 \times - 5$</p> <p>1) Sign: always a $+$</p> <p>2) Number: Multiply 4 and 5 after ignoring the $-$ sign in both numbers: $4 \times 5 = 20$</p> <p>Answer: $+ 20$</p> <p>B) Different sign in two numbers:</p> <p>1) Sign: always a $-$</p> <p>2) Number: Multiply the two numbers as usual after ignoring the signs</p> <p>Example: -4×5</p> <p>1) Sign: always a $-$</p>

<p>2) Number in the answer is subtracting the smaller number from the bigger number after ignoring the sign</p> <p>Example: $-4 + 5$</p> <p>1) 5 is the bigger number between 4 and 5 (after ignoring the $-$ in 4), so the sign of the answer is the sign of 5: $+$</p> <p>2) Number in the answer is subtracting 4 from 5 after ignoring the $-$ in 4 and $+$ in 5: $5 - 4 = 1$</p> <p>Answer: $+ 1$</p> <p>Example: $4 - 5$</p> <p>1) 5 is the bigger number between 4 and 5 (after ignoring the $-$ in 5), so the sign of the answer is the sign of 5: $-$</p> <p>2) Number in the answer is subtracting 4 from 5 after ignoring the $-$ in 5 and $+$ in 4: $5 - 4 = 1$</p> <p>Answer: $- 1$</p>	<p>2) Number: Multiply 4 and 5 after ignoring the $-$ sign in 4 and $+$ sign in 5: $4 \times 5 = 20$</p> <p>Answer: $- 20$</p> <p>Example: 4×-5</p> <p>1) Sign: always a $-$</p> <p>2) Number: Multiply 4 and 5 after ignoring the $-$ sign in 5 and $+$ sign in 4: $4 \times 5 = 20$</p> <p>Answer: $- 20$</p>
--	--

Other Facts:

- 1) $+$ and $-$ come together during Addition or Subtraction, it becomes a $-$
- 2) If there is no sign in a number, it is by default a $+$
- 3) The sign of a number is the sign that is present to the left of a number

Example: $7 - 5$

7 doesn't have a sign so it is $+$ and 5 has a sign $-$ to it's left so the sign of 5 is $-$