Flow Chart for Integer Operations

**Addition**

**Integer Operations**

- Addition
- Subtraction
- Multiplication & Division

**Catchy Song to Remember Integer Addition Rules**

Same sign, add and keep.
Different sign subtract.
Keep the sign of the higher number;
Then you'll be exact.

—Anonymous

**Adding two numbers with the SAME SIGN**

When adding two numbers with the SAME SIGN:
- answer takes common sign
- then, ADD the two numbers together

-8 + (−19) = −27

**Adding two numbers with DIFFERENT SIGNS**

When adding two numbers with DIFFERENT SIGNS:
- answer takes sign of whichever number is larger
- then, SUBTRACT the two numbers

-8 + 17 = +9
12 − 16 = 12 + (−16) = −4

**Procedure for CONVERTING Integer Subtraction to Integer Addition**

When subtracting integers be sure to change the signs by …
1. CHANGE SUBTRACTION TO ADDITION,
2. then, take the OPPOSITE OF the number immediately to the right.

-19 − 25 = −19 + (−25) = −44
−8 − (−3) = −8 + (3) = −5

**Multiply (or Divide) two numbers with the Same Sign → Answer is POSITIVE**

(+) • (+) = +

**Multiply (or Divide) two numbers with Different Signs → Answer is NEGATIVE**

(+)(−) = −

− = −

(−)(−) = +

− = +

(−)(+) = −

− = −

Addition

Subtraction

Multiplication & Division