Operations with Integers

Addition

1. <u>Like signs</u> - add and keep the sign
    Ex: $7 + 3 = 10$
             $^-7 + ^-3 = ^-10$

2. <u>Different signs</u> – subtract,
    answer takes the sign of the number with the larger absolute value
    Ex: $7 + ^-3 = 4$
           $^-7 + 3 = ^-4$

Sutraction

Change all subtraction to addition and then follow rules for addition above
Ex: $7 – 3 = 7 + ^-3 = 4$
       $^-7 – 3 = ^-7 + ^-3 = ^-10$
       $7 – ^-3 = 7 + 3 = 10$

Multiplication and Division

1. <u>Like signs</u> or even number of negatives – answer is positive
    Ex: $7 \times 3 = 21$
           $^-7 \times ^-3 = 21$
           $^-7 \times ^-3 \times ^-1 \times ^-1 = 21$ (four negatives, four is an even number)

2. <u>Different signs</u> or odd number of negatives – answer is negative
    Ex: $7 \times ^-3 = ^-21$
           $^-7 \times 3 = ^-21$
           $^-7 \times ^-3 \times ^-1 \times ^-1 \times ^-1 = ^-21$ (five negatives, five is an off number)