Integer Operation Rules

ADDITION

- If the signs are the same, the result carries the same sign.

- **For example:**   6 + 4 = 10   or   -6 + -4 = -10

- If the signs are different, take the difference between the numbers (disregarding the negative sign for a moment), and keep the sign of the larger.

- **For example:**   -6 + 4 = -2   or   6 + -4 = 2

SUBTRACTION

- Change subtraction to "adding the opposite."

- **For example:**   4 – 6   is the same as 4 + -6 which is -2
- **Another example:**   4 - -6   is the same as 4 + 6 which is 10
- **Another example:**   -4 – 6   is the same as -4 + -6 which is -10
- **Another example:**   -4 - -6   is the same as -4 + 6 which is 2

MULTIPLICATION

- If the signs are the same, the result is positive.

- **For example:**   (4)(6) = 24   or   (-4)(-6) = 24

- If the signs are different, the result is negative.

- **For example:**   (-4)(6) = -24   or   (4)(-6) = -24

DIVISION

- If the signs are the same, the result is positive.

- **For example:** $\dfrac{24}{6}$ = **4**   or $\dfrac{-24}{-6}$ = **4**

- If the signs are different, the result is negative.

- **For example:** $\dfrac{-24}{6}$ = **-4**   or $\dfrac{24}{-6}$ = **-4**

Practice

[Remember **BEDMAS** for order of operations]

1. (-2)(-4) + (3)(-1) =   ____
2. (-5)(2) − (6)(1) =   ____
3. $\left(\dfrac{-15}{3}\right) + \left(\dfrac{-50}{-5}\right)$ =   ____
4. $\left(\dfrac{-4}{-1}\right) - \left(\dfrac{-30}{6}\right)$ =   ____
5. (-2 + 4^2) ÷ ((2)(3) + 8) =   ____
6. (-27 ÷ 3^3) ($\left(\dfrac{-12}{-3}\right)$ - 10) =   ____
7. 2^4 + -5 + (9)(2) − (-6) ÷ (-1) =   ____
8. $\dfrac{(0-4+9)}{(-1)^5}$ =   ____

Answers For Practice

1. 5
2. -16
3. 5
4. 9
5. 1
6. 6
7. 23
8. -5