Evaluating Algebraic Expressions

Variable - a letter used to represent a number

Coefficient - the number attached to the variable

$3m$	$1x$	$-1y$	$\frac{1x}{2} = \frac{1}{2} \cdot x$ OR $\frac{1}{2}x$
V = m C = 3	V = x C = 1	V = y C = -1	V = x C = $\frac{1}{2}$

Algebraic Expression - a combination of numbers and variables using addition, subtraction, multiplication, division, exponents and roots

$18-3x$	$\sqrt{5+2x}$	x^2+7x-1	$\frac{2x-1}{13}$

Directions: Evaluate each expression for $a=-1$, $b=-2$ and $c=-3$.

1. $a+(-b)$ $= a+(-1b)$
$= (-1)+(-1 \cdot -2)$
$= -1+2$
$= \boxed{1}$

2. $a-(-c) = +a+(+c)$

$a+c = (-1)+(-3) = \boxed{-4}$

3. $-a+b$ $= -1a+b$
$= -1(-1)+(-2)$
$= 1+(-2)$
$= \boxed{-1}$

4. $-a-(-b) = -a+(+b)$

$= -a+b$
$= -1a+b$
$= -1(-1)+(-2)$
$= 1+(-2)$
$= \boxed{-1}$

5. $c+(-b)+(-a)+b$

$c+(-1)(b)$

$-3+(-1)(-2)$

$-3+2 = -1+(-1)(a)$

$= -1+(-1)(-1)$

$= -1+1$

$= 0+b$

$= 0+(-2)$

$= \boxed{-2}$

6. $\frac{ab}{-c} = \frac{ab}{-1\cdot c} = \frac{(-1)(-2)}{(-1)(-3)}$

$= \boxed{\frac{2}{3}}$

7. $\frac{2c}{a+b+c} = \frac{2(-3)}{(-1)+(-2)+(-3)} = \frac{-6}{-6} = \boxed{1}$

$-3+(-3) = -6$