## Integers

Integers (in-te-gers) are the whole numbers and their opposites.


## Adding

When adding integers, keep the sign with the number.
$10-2=(+10)+(-2)$

- positive numbers $(+)$ represent "having" (If there is no sign in front of the number, it is positive.)
- negative numbers (-) represent "owing"

If the numbers have the same sign, add and keep the sign.
If the numbers have opposite signs, find the difference (subtract) and keep the sign of the larger number.

Examples:

$$
\begin{aligned}
& (+10)+(-2)=+8 \\
& (+10)+(+2)=+12 \\
& (-10)+(-2)=-12
\end{aligned}
$$

## Subtracting

Change subtracting to adding the opposite. Then follow the method for adding integers.

Examples:

$$
\begin{array}{ll}
(+10)-(-2) & =(+10)+(+2)=12 \\
(-10)-(+2) & =(-10)+(-2)=-12 \\
(-10)-(-2) & =(-10)+(+2)=-8 \\
(10)-(2) & =(+10)+(-2)=+8
\end{array}
$$

## Multiplying and Dividing

Remember that a double negative is a positive. If you are not, not going, then you are going. So, $-(-2)=+2$

So, every pair of negatives makes a positive. If you have an odd negative left, the number is negative.

Examples:

$$
\begin{array}{ll}
(+10)(-2) & =-20 \\
(-10)(+2) & =-20 \\
(-10)(-2) & =+20 \\
(10)(2) & =+20 \\
-(-(-3)) & =-3 \\
(+10) \div(-2) & =-5 \\
(-10) \div(+2) & =-5 \\
(-10) \div(-2) & =+5 \\
(10) \div(2) & =+5
\end{array}
$$

