

## Basic Rules to Remember

When doing basic algebra, you need to be really good at working with the rules for adding/subtracting and multiplying/dividing. Once you learn these rules, you will find algebra a little easier.

### Adding and Subtracting

- When adding or subtracting numbers that have the same sign, you add the numbers together and keep the sign.

- $3 + 5 = 8$
- $7 + 15 = 22$
- $-2 - 12 = -14$
- $-15 - 16 = -31$

- When adding or subtracting numbers that have opposite signs, you subtract the numbers and keep the sign of the larger number.

- $-5 + 10 = 5$
- $12 - 7 = 5$
- $-15 + 3 = -12$
- $-2 + 9 = 7$

### Multiplying and Dividing

- When you are multiplying and dividing, the same rules apply:

Sign	x or ÷	Sign	Answer
Positive	x or ÷	Positive	Positive
Negative	x or ÷	Negative	Positive
Positive	x or ÷	Negative	Negative

- $5 \times 6 = 30$
- $-5 \times -6 = 30$
- $5 \times -6 = -30$
  
- $21 \div 7 = 3$
- $-21 \div -7 = 3$
- $21 \div -7 = -3$