

## Multiplying positive and negative numbers | Pre-Algebra |

If I multiply a negative times a positive times a negative, I'm going to get a negative. The order in which we multiply things should not change the product. One of these two numbers is negative. And so our product is going to be negative. Or another way to think about it is if I had 2 times 3, I would get 6. If I have a negative times a negative, the negatives are going to cancel out. And that's going to give me a positive number. And in future videos, we'll explore why this is and why this makes mathematics more all fit together. I encourage you to try them out before I do them. The negative and the negatives cancel out. Your product is going to be positive. That's this situation right over there. The negative is 5 times 10 times negative 10. Negative is negative 5 times negative. Negative times a negative are negative times negative is negative. Then you are just left with a positive product.

## Multiplying numbers with different signs | Pre-Algebra |

When we multiply three numbers, some are going to be positive and some are going to be negative. A positive number multiplied by a positive number is obviously a positive. A negative number multiplied by a negative number is going to be a negative. Different signs mean we're going to have a negative number.

## Adding/subtracting negative numbers | Pre-Algebra |

Negative numbers are actually smaller numbers than positive numbers. For example, negative 20 is smaller than positive 20. Negative 50 is actually even a smaller number than negative 20 because it's even further to the left of negative 20. That's just something you'll get an intuitive feel for. Sometimes when you start, you feel like 50 is a bigger number than 20, but it's a negative 50. Negative 7 is equal to negative 7. Negative 3 plus 5 is also equal to 2. The negative signs actually cancel out of negative numbers, so this is the same thing as 2 plus minus 3. The difference between 12 and 5 is 7, but the numbers are that far apart, but now we're starting with the lower number. The more you do the more practice you have, and the modules explain it pretty well, probably better than I do. So let's just do a ton of problems. Let's do a bunch of these. I know I'm probably confusing you, but practice is what's going to really help us.

If you're new to algebra, I think this will give you a good introduction. I recommend that you just do the modules, because the modules have a nicer graphic than anything I could draw on this chalkboard. You could also attend the seminar on adding and subtracting negative numbers.