way they want. So not only put them next to each other, but let's actually group them..

- If we want to multiply two fractions A over B times c times C over D, we just multiply across the top so a times C and then multiply over the bottom, so b times D times D really simple multiplying fractions is really easy so let 's see an example three over five times two over seven well we just get three times two in the numerator over 5 times seven and in the denominator so it 's just six over 35. Really basic stuff. subtraction is kind of nasty it has it does n't have very many good properties that we like for instance, 6 minus 2 is not equal to 2 minus 6.. subtraction can be confusing with the order of operations. If we're not careful in our example for this one is 10 minus 6 plus 2, but all is not lost. There 's something we. Can do we can actual wturn subtraction into addition. when we think of subtraction addition of a negative number, we get commutativity back because we 're turning it into addition. So we can change to beer. So now we have negative 2 plus 6.. The important fing to take a vay rom this video is that subtraction is not commutative and it's not associative ... Dre
- We 'll talk about factoring with the rational roots test and synthetic division and things like that but for now we 're just gon na group it so how does that work well. We group the first two terms together and then we add the second two terms. this will be x cubed plus 6x squared plus and then minus 4x minus 24. So we have n't changed anything. We just decided to group these into pairs. 1 times x is still x and 1 times 3 times 3 is still 3, so we 're gon na factor out of 1. It 's really not factoring it out it's always been there. now we have an x + 3 common to both terms. So we factor that out so this becomes 3x squared plus one x by x plus three and that 's as simple as we can get this. particular problem, but as you can see factoring by grouping is it makes makes these problems really easy.