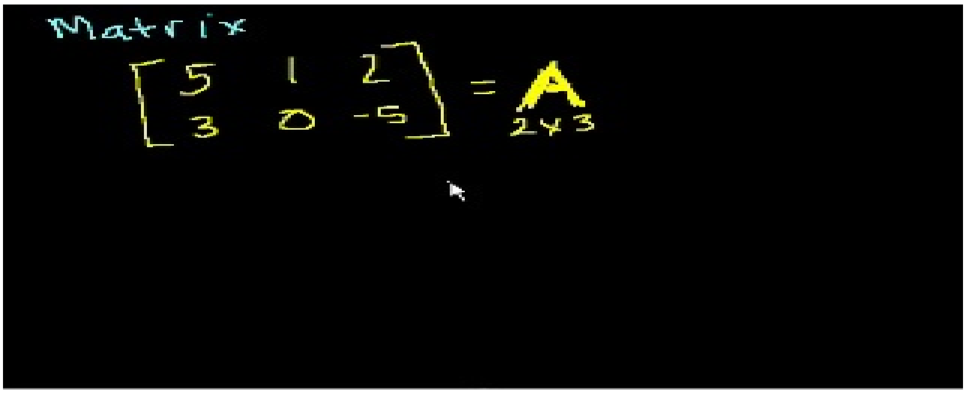
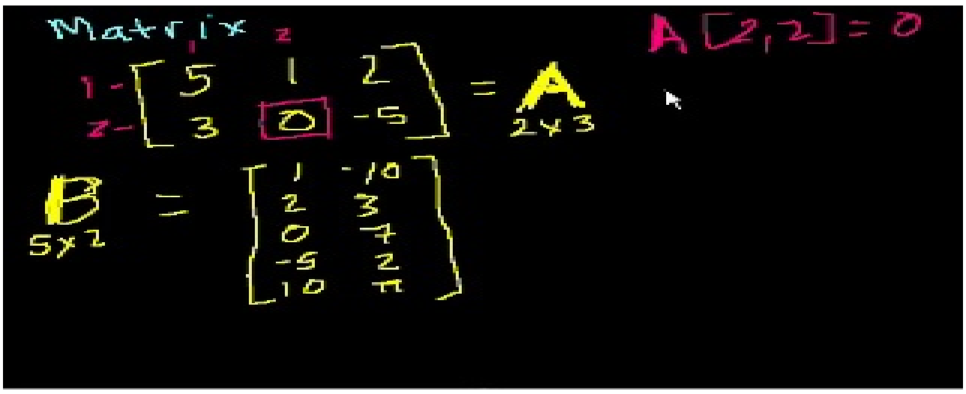
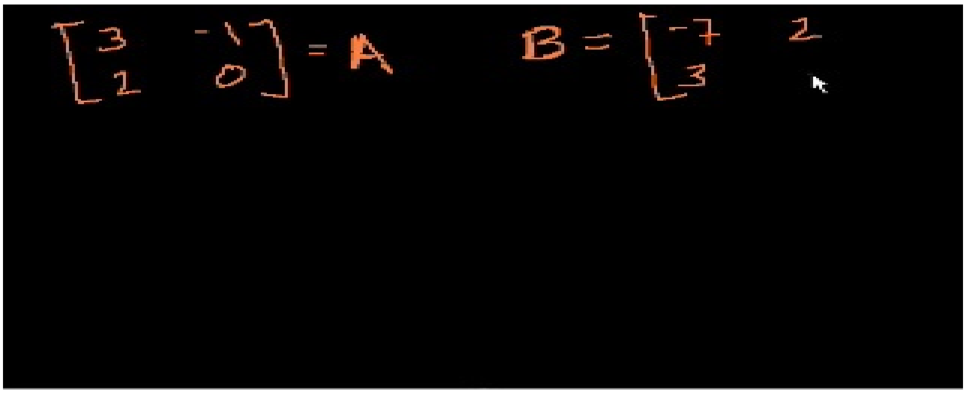


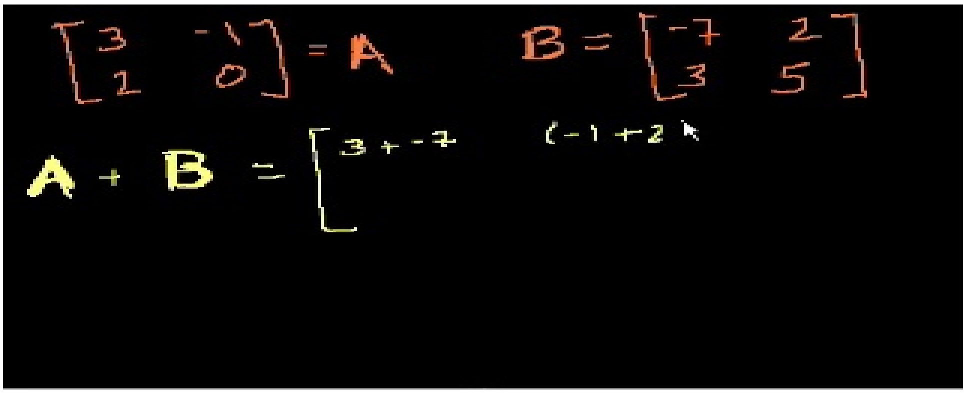
here-- 7, 2, pi.That is a 5-by-2 matrix.So I think you now have kind of a convention that all amatrix is is a table of numbers.You can represent it when you're doing



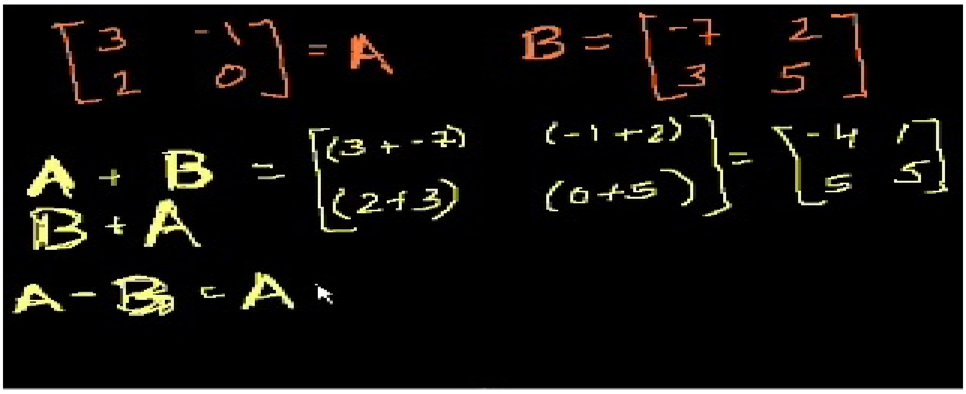
So that equals 2.So this is just all notation of what a matrix is.It's a table of numbers that can be represented this wayand we can represent it as different elements that way.So you might be asking, Sal, well, that's nice.But the important thing to realize is that a matrix, it'snot a natural phenomenon.It's not like a lot of the mathematical concepts we'vebeen looking at.It's a way to represent a mathematical concept or a way



going to make matrices add the way I'm about to show you,because it's useful for a whole set of phenomena.So when you add two matrices, you essentially just add thecorresponding elements.So how does that work?



2 plus 3 is 5, and 0 plus 5 is 5.So there we have it.That is how we humans have defined theaddition of two matrices.And by this definition, you could imagine that this is



Well, B is minus 7, 2, 3, 5.When you multiply a scalar, when you just multiply anumber times a matrix, you just multiply the number timesevery one of it's elements.So that equals A, matrix A, plus the matrix.