

Isomorphisms of linear spaces

For those of you who are still suspicious when I say that P_5 , $\mathbb{R}^{2 \times 3}$ and \mathbb{R}^6 all seem the same to me when it comes to the operations of linear algebra (addition and scalar multiplication), I will make one last attempt on Wednesday 10/18. I (in the sense of the 800-pound gorilla) will *convince* you that you can barely tell $\mathbb{R}^{1 \times 6}$ and $\mathbb{R}^{6 \times 1}$ apart, and continue from there.