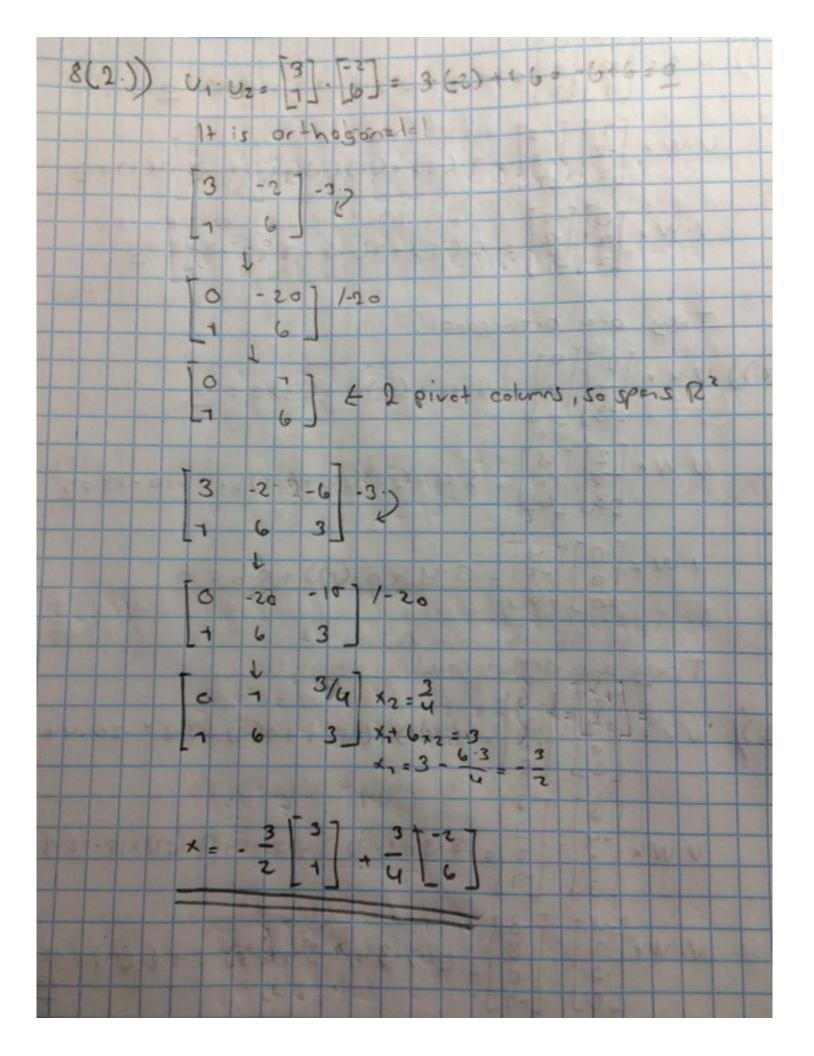
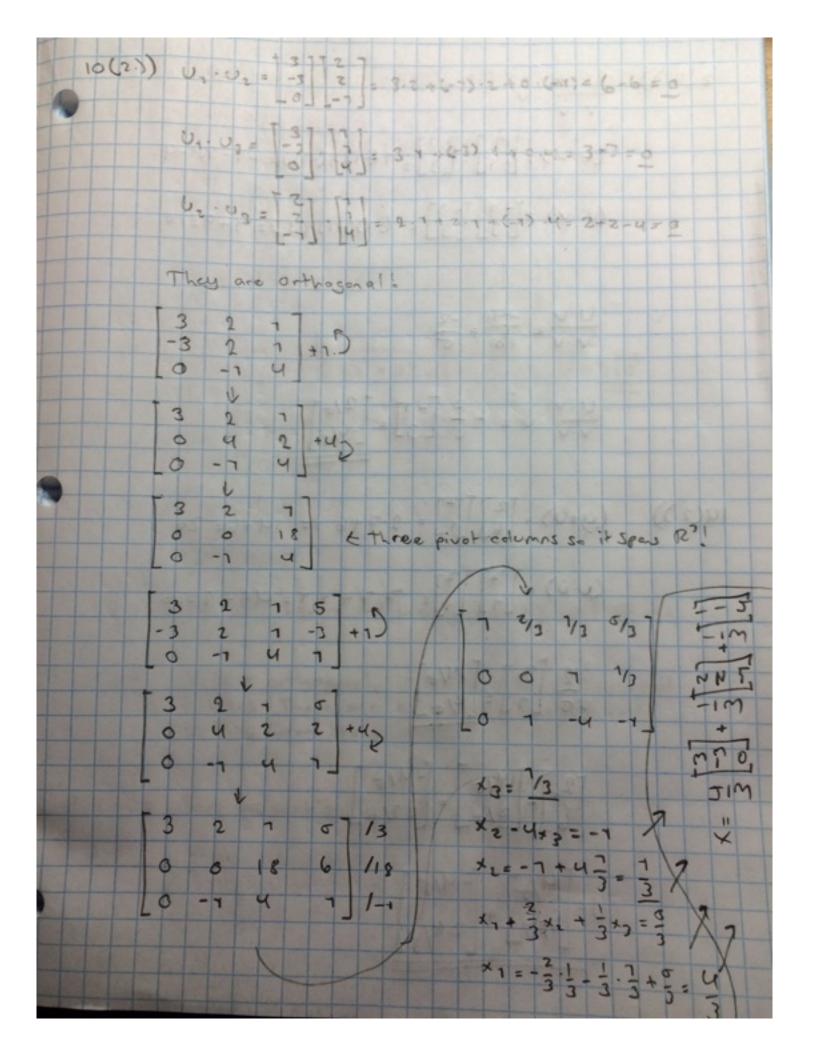
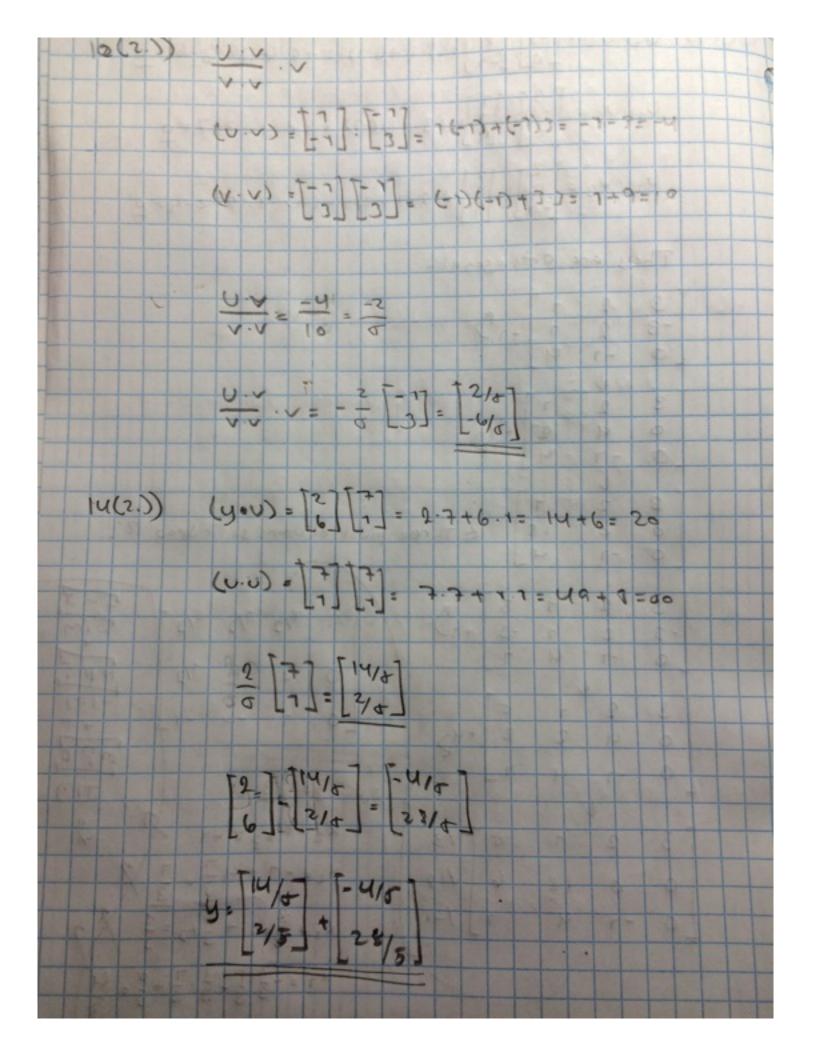


2(2)) 04- 1-2 1 V.W. 0 -5 2 : 0(5) +1(2) They are orthogonal! U.W = 2 [4] = 2 4+(-0)(-2)+(-3)6.5+10-18=0 V.W = 0 1-2 = 0.4 + 0.(-2) + 0.6 = 0 They are orthologonal! 6(2)) 0 = -4 -3 = 5 (-4) + (-4) + + 0(-3) + 3.87 - 20 - 4 + 24 - 0 UW= 0 3 = 5.3+(-4) 3+0-5+3(-1)=15-12-3=0 V. W= [-1] [3] = (-1) 3 + 1 3 + (-3) 5 + 8 · (-1) = 12+7-15-6= They are not orthologonal!







((2.)) y. v= [9]. []= (-)) 1+9-2 = -3+18 = 1+ E 0 = 3 2 = 3 119-311=19-90011=11737-1711= 11 3 1 = 16-6) + 32 = 136+0 = 145 = 3/5 24(2.1) a) They have to to be orthogonal .. Facse b) FALSE e) TRUE d) TRUE e) It's square and linearly independent so true 28(2)) If U is orthogonal, it also has n orthonormal vectors. These are all lieurly independent, so they form basis for RT. 30(2)) See explanation for 28. If you interchange some of the columns, they will still be arthogenal because it is not effected by position/movement