Axler 6.B #3 May 4, 2021

##+classoption: twocolumn

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1 | Exercise 3

Axler 6.13 ex 3 and one Me
orthonormalify (1,0,0), (1,1,1), (1,1,2)
$e_1 = (1, 0, 0), e_2 = normalize((1, 1, 1) - (1, 0, 0))$
= Normalize ((0,1,1))
= (0, 1/2, 1/2)
$e_3 = normalize((1,1,2)-(1,0,0)-\frac{3}{4}(0,\frac{1}{4},\frac{1}{4}))$
= normalize (0,1,2)-(0, 3, 3)
= normalize $(0, \frac{1}{2}, \frac{1}{2})$
=(0, 元, 元)
(1,0,0), (0, 症,症), (0, 症,症)
0+===== 0 V so all pairwise inner
Products are zero
V=(1,2,3)
= (1,2,3),(1,0,0)) (1,4(1,2,3),(0,在,症)) (1,33),(0,症症)
= [1e, + \frac{5}{12}e_2 + \frac{1}{12}e_3]
=(1,0,0)+(0, 至, 至)+(0, 章, 章)
=(1, \frac{1}{2}, \frac{1}{2})
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