$$(2) \sqrt{1} = (1,1) - (0,0) = (1,1)$$

$$\sqrt{2} = (3,1) - (0,0) = (3n)$$

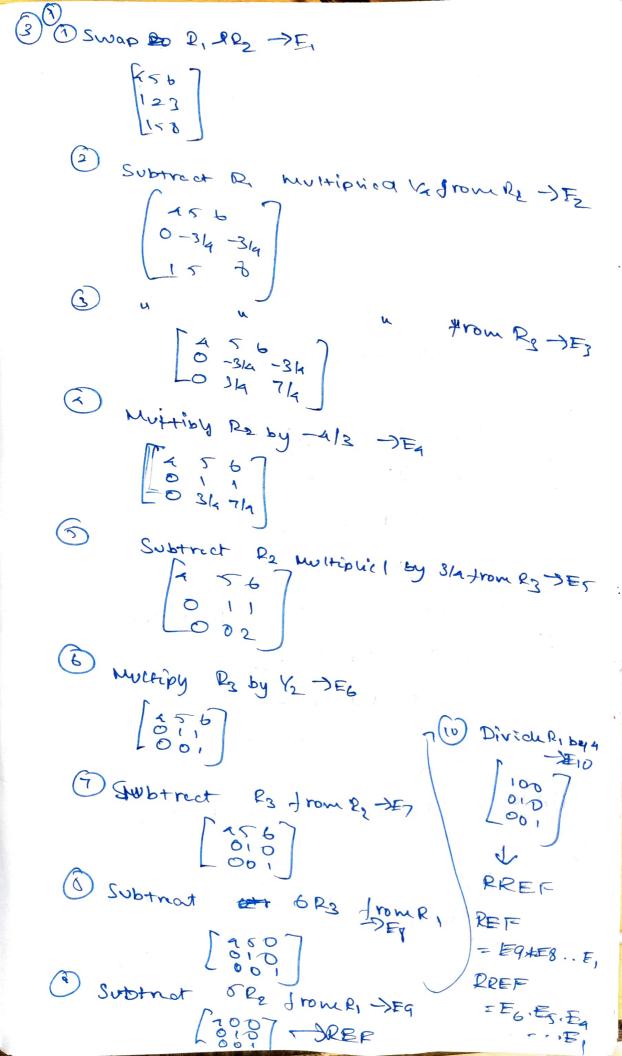
$$\sqrt{2} = (3n) - (0,0) = (3n)$$

$$(\sqrt{5}) = 2\sqrt{1} + \sqrt{2}\sqrt{2} = 2(1/1) + \sqrt{2}(3/4)$$

$$A = \begin{bmatrix} 123 \\ 456 \end{bmatrix}$$

$$A = \begin{bmatrix} 123 \\ 456 \end{bmatrix}$$

$$A = \begin{bmatrix} 123 \\ 456 \end{bmatrix}$$



-> (V), V2 V3) Huu, Rank-33 line Rank is same as oursincy independent. $\begin{bmatrix} 1 & 3 & 1 & 2 & 3 \\ 0 & 3 & 5 & 5 \\ 0 & 0 & 0 & 0 \end{bmatrix}$ F[1,2] : [0,0] * [0,0] The intenstry Obs his Product is Iduary Matria which implies that by applying the row operation of swapping the first & second nows twice enough 1 Uts Consider the Same PREF Obtained inthe Dow Space. Pow Space is spanned by Rows of RRFF Rowspac(A) = Spank[1,0,0] [0,10] [001]} Column Spice: Column mu is spanned by theorying Span [[141] [255] [368]]

123 10 2 [10-1 | 0] NULL Space (A) = Span S[-12, 1] 3 & lift Nous space. It consists of all vectors which which Multiplied by Etransporm of Matrix MISUIT IN Zuo Vectom. AT 10 = | 1 x 1 | 0 | 368 | 0 c [10-1]0 00000 Similar to Nullspace Cyt Nullspace = Span Eliza-D DEmpty set fails to satyly the equiner of harry a 2000 vectors. A vector space most have a 2010 Ve Mon. Since Burpy space donw have any element 1+ tours them a zero vertore et mus it does not eatility that mariant. 6 Nothert Russes U E-ous down not forma vectorspace Oue R Becarn Octosure under Adolphou is failed to sertify by the sit as in a verton space sum must selay to the rection space itself which is not

@ Crosum under Scalar Multiplications The scalar Moltiphication objund for (60) & (-os) violatus closur unau Scale pur tiprication. Fou example (1) * 00 = -00 & (i) (-00) =00 (5) Escrittence of zuo Vecton: a VS must have a Overton, Honny Zuo vector & not-dyfinel, @ Faisture of Addition towns: for any vector v + hu mot exist an diddition invure = V such - That V+(-V) =0 But hur thuris no dyfund addirin invers for