

**Source:**

## **1 | Definitions**

1.1 | **TODO group**

1.2 | **TODO field**

1.3 | **TODO non-singular matrices**

## **2 | Connections**

2.1 | **TODO connect direct sum and linear independence**

2.2 | **TODO matrices to represent complex numbers**

## **3 | Computation**

3.1 | **TODO Find the determinant of matrices**

3.2 | **TODO Find equations of lines and planes using cross product and dot product**

## **4 | Derivations**

4.1 | **TODO properties of the determinant**

4.2 | **TODO inverse of a 2x2 matrix**