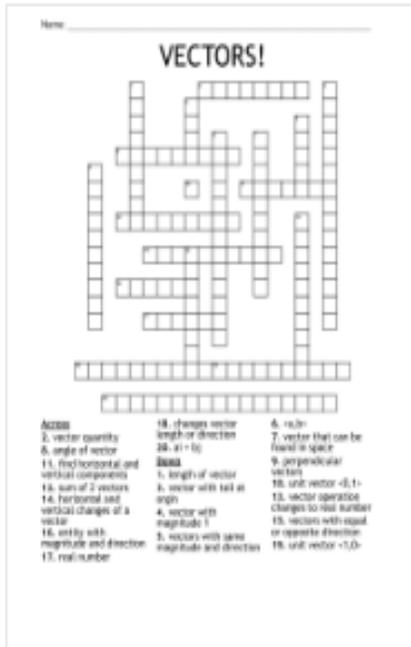




DEPARTMENT OF MATHEMATICS

UNIT I VECTOR CALCULUS



VECTORS! Crossword

entity with magnitude and direction

real number

length of vector

angle of vector

vector quantity

vector that can be found in space

vector with tail at origin

$\langle a, b \rangle$

vectors with same magnitude and direction

vectors with equal or opposite direction

sum of 2 vectors

vector with magnitude 1

unit vector $\langle 1, 0 \rangle$

unit vector $\langle 0, 1 \rangle$

perpendicular vectors

vector operation changes to real number

$a_i + b_j$

horizontal and vertical changes of a vector

find horizontal and vertical components

changes vector length or direction