

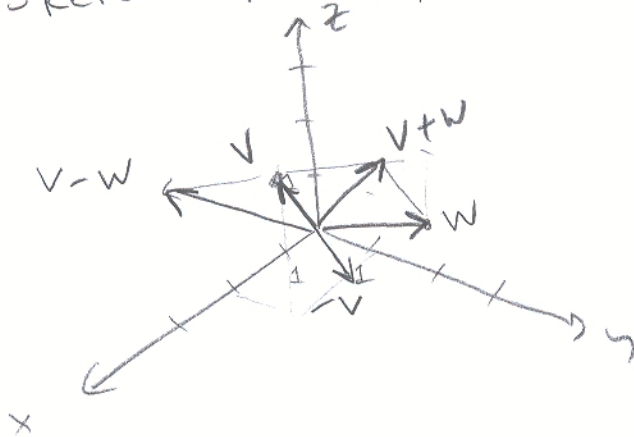
Homework 1 solutions

Math 212

January 14, 2009

Section 1.1

8. Sketch $v = (2, 1, 3)$, $w = (-2, 0, 1)$, $-v$, $v+w$, & $v-w$.

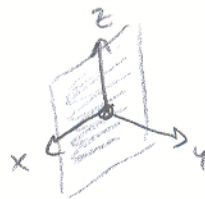


9. What restrictions must be made on $x, y,$ & z so that (x, y, z) represents a point on the y -axis?

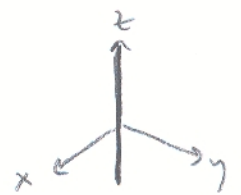
$x=0$ & $z=0$



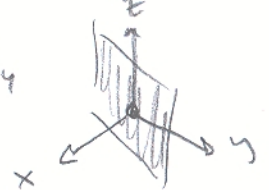
z -axis? $x=0$ & $y=0$.



in the x - z plane? $y=0$.



in the y - z plane? $x=0$.



13. Describe the line passing through $(-1, -1, -1)$ in the direction of \hat{j} .

Parametrically: $l(t) = (-1, -1, -1) + t(0, 1, 0)$

Set theoretically: points (x, y, z) satisfying $x = -1$ and $z = -1$

