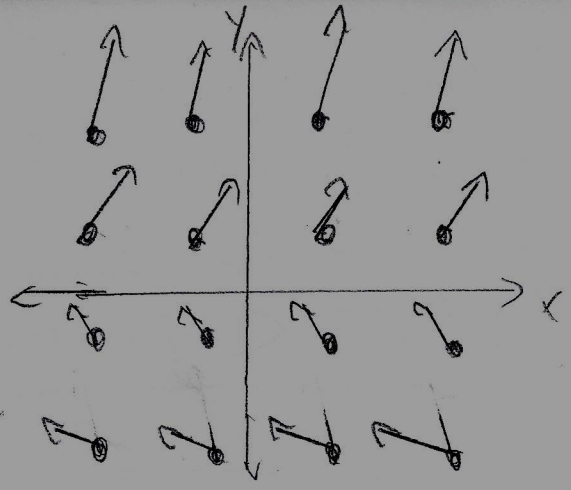
(13) $F(x,y) = \langle y, y+2 \rangle$

$F(x,1) = \langle 1,3 \rangle$ $F(x,-3) = \langle -3,-1 \rangle$

$F(x,2) = \langle 2,4 \rangle$

$F(y,-1) = \langle -1,1 \rangle$

$F(x,-2) = \langle -2,0 \rangle$



Graph I is most similar to $\langle y, y+2 \rangle$ in terms of magnitude and direction of its vectors.

(15) $F(x,y,z) = i + 2j + 3k = \langle 1,2,3 \rangle$

Since $F(y,y,z)$ has a unidirectional vector field. All points on (x,y,z) will have vector $\langle 1,2,3 \rangle$ in same direction and magnitude. Graph IV is the only graph with the preceding property therefore has vector $\langle 1,2,3 \rangle$ on all points.

(17) $F(x,y,z) = xi + yj + 3k = \langle x,y,3 \rangle$

Since for every x,y, the k component in the vector is always 3, therefore every vector for every point (x,y,z) has a k component of 3, and is pointing upwards as per the right hand rule. Graph III is the only graph with the preceeding property, therefore has vector $\langle x,y,3 \rangle$ applied for every x,y.