1. Vectors \vec{u} , \vec{v} , and \vec{w} are shown. Draw

- (a) $2.5\vec{u}$
- (b) $-\vec{v}$
- (c) $-\frac{1}{2}\vec{w}$
- (d) $\vec{u} + \vec{v}$
- (e) $\vec{w} \vec{u}$
- (f) $2.5\vec{u} \frac{1}{2}\vec{w}$
- (g) $\vec{u} + \vec{v} + \vec{w}$
- 2. Compute the length of \vec{u} . (Assume the dots are spaced 1 apart on the grid above)
- 3. Compute $||\vec{w} \vec{u}||$
- 4. Find the angle between \vec{u} and \vec{w} .
- 5. Find three unit vectors that add to the zero vector.
- 6. Find the equation of the plane through (1,0,3) with normal vector $2\vec{i} \vec{j} + 4\vec{k}$.