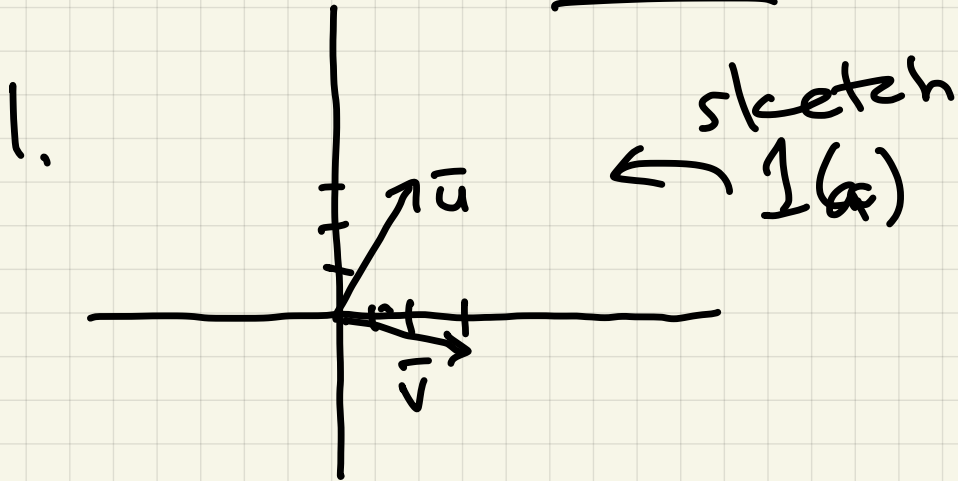


Quiz 2



(b) $\vec{u} = \langle 2, 3 \rangle$

(c) $\vec{v} = \langle 3, -1 \rangle$

(d) $\vec{u} + \vec{v} = \langle 5, 2 \rangle$

(e) $\vec{u} - 4\vec{v} = \langle -10, 7 \rangle$

2. (a) $|\vec{w}| = | \langle -4, 3 \rangle | = \sqrt{16 + 9} = 5.$

(b) $\vec{u} = \frac{\vec{w}}{|\vec{w}|} = \langle -4/5, 3/5 \rangle$

(c)

$$\theta = \cos^{-1}\left(-\frac{4}{5}\right)$$

$$\tan^{-1}\left(-\frac{4}{3}\right) + \pi$$

$$\pi - \sin^{-1}\left(\frac{3}{5}\right)$$

