

V2 - Component to Polar (Special Right Triangles)

Given a vector in component form, find the vector's magnitude and direction (using an angle in standard position) and write the answer in polar form (magnitude, angle)

1. $\vec{a} = \langle 1, 1 \rangle$
 $\vec{b} = \langle -1, 1 \rangle$
 $\vec{c} = \langle -1, -1 \rangle$
 $\vec{d} = \langle 1, -1 \rangle$

2. $\vec{e} = \langle 1, \sqrt{3} \rangle$
 $\vec{g} = \langle -1, \sqrt{3} \rangle$
 $\vec{j} = \langle -1, -\sqrt{3} \rangle$
 $\vec{z} = \langle 1, -\sqrt{3} \rangle$

3. $\vec{f} = \langle \sqrt{3}, 1 \rangle$
 $\vec{h} = \langle -\sqrt{3}, 1 \rangle$
 $\vec{i} = \langle -\sqrt{3}, -1 \rangle$
 $\vec{k} = \langle \sqrt{3}, -1 \rangle$

4. $\vec{m} = \langle 1, 0 \rangle$
 $\vec{n} = \langle 0, 1 \rangle$
 $\vec{p} = \langle -1, 0 \rangle$
 $\vec{q} = \langle 0, -1 \rangle$