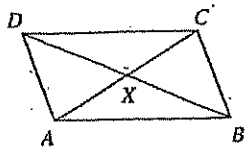


Refer to parallelogram $ABCD$ to determine whether each statement is True or False.

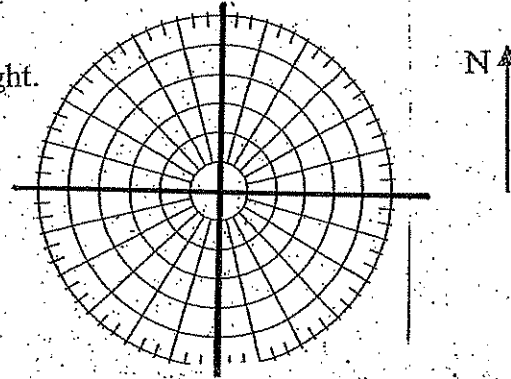


1. $\vec{DC} + \vec{CX} = \vec{DX}$
3. $\vec{XD} + \vec{XB} = \vec{0}$
5. $\vec{BA} + \vec{AD} = \vec{BD}$
7. $\vec{AX} + \vec{XB} + \vec{DA} = \vec{0}$
9. $2\vec{DX} + \vec{BC} = \vec{DC}$

2. $\vec{XB} = \vec{XD}$
4. $2\vec{XB} = \vec{DB}$
6. $\vec{DC} + \vec{CB} = \vec{DB}$
8. $\vec{BD} - \vec{AD} = \vec{BA}$
10. $\vec{BA} + \vec{DA} = \vec{CA}$

Vector u has magnitude 3 and bearing 315° , vector v has magnitude 2 and bearing 180° , and vector w has magnitude 3 and bearing 90° . Use these vectors to sketch the following:

Sketch vectors u , v , and w on the polar grid at the right.



- | | | | | |
|-------------|-----------------|-----------------|------------|-------------|
| 1. $u + w$ | 2. $u + v$ | 3. $u - v$ | 4. $u - w$ | 5. $u + 2v$ |
| 6. $2u + w$ | 7. $u + 2v - w$ | 8. $w - u - 2v$ | | |