

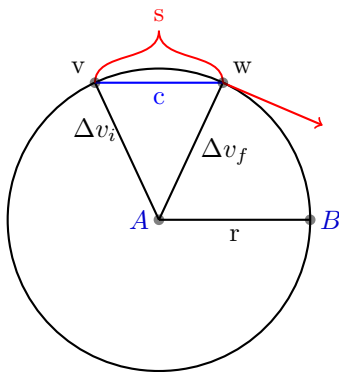
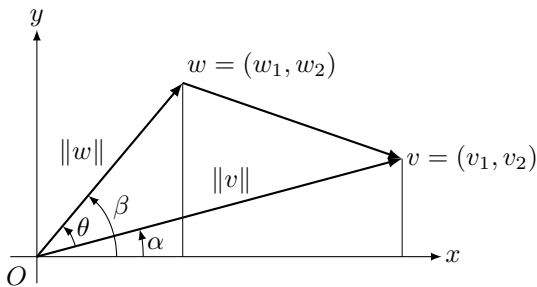
Name _____

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Centripetal Acceleration Formulas

An object is said to be moving in uniform circular motion when it maintains a constant speed while traveling in a circle. Remember that since acceleration is a vector quantity comprised of both magnitude and direction, objects can accelerate in any of these three ways:

1. constant direction, changing speed (linear acceleration);
2. constant speed, changing direction (centripetal acceleration);
3. change in both speed and direction (angular acceleration).



Proposition I

To construct an *equilateral triangle* on a given *finite straight line*.

Let *AB* be the given *finite straight line*. ...

$$a = \frac{\Delta v}{\Delta t} \quad (1)$$

$$a = \frac{v_f - v_i}{\Delta t} \quad (2)$$