

# Vectors

Vectors have a magnitude and direction

The  $i$  direction is along the positive  $x$  axis,  
the  $j$  direction is along the positive  $y$  axis

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$$R = R_0 + vt$$

The position of a vector is the starting  
point + velocity times time

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We use Pythagoras to find:

The length of a line

The magnitude of a force

The speed

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the direction of  $\vec{AB}$  is the position of B  
minus the position of A