$r=\|\boldsymbol{v}\|$ $\qquad$ $=$

Formula for magnitude:
$\qquad$ $=$

Formula for direction angle:

How to find $x$-coordinate:
How to find $y$-coordinate:

Dot product of 2 vectors:
Scalar multiplication:

Linear combination:
Add/subtract vectors:

Angle between 2 vectors:

Parallel vectors:
Orthogonal or Perpendicular vectors:

VECTORS-- Component form of a vector:
OR
OR
$r=\|\boldsymbol{v}\|$ $\qquad$ $=$

Formula for magnitude:
$\theta=$ $\qquad$
$\qquad$ $=$

Formula for direction angle:

How to find $x$-coordinate:
How to find $y$-coordinate:

Dot product of 2 vectors:
Scalar multiplication:

Linear combination:
Add/subtract vectors:

Angle between 2 vectors:

RECTANGULAR COORDINATES-- Ordered pair for rectangular coordinate:
$h=$ $\qquad$
$\square$
Formula for hypotenuse:
$\theta=$ $=$

Formula for reference angle:

How to find $x$-coordinate:
How to find $y$-coordinate:

Changing rectangular coordinates to polar coordinates:

Changing rectangular equations to polar equations:

RECTANGULAR COORDINATES-- Ordered pair for rectangular coordinate:
$h=$ $\qquad$

Formula for hypotenuse:
$\theta=$ $\qquad$
$\qquad$ $=$

## Formula for reference angle:

