

NAME _____

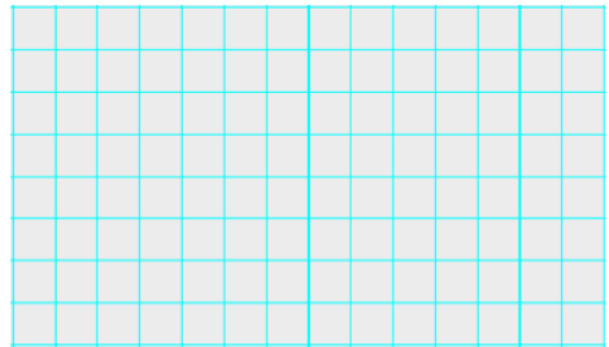
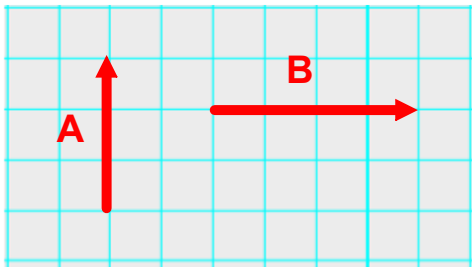
PERIOD _____

VECTOR ADDITION

Directions:

For each problem, vectors **A** and **B** are shown. Sketch the head-to-tail addition of **A+B** on the empty grid and label each vector. Draw and label the resultant (**R**). Record the magnitude and direction of each component and add the components to determine the components of the resultant. Use Pythagorean theorem and SOH CAH TOA to determine the magnitude and direction of **R**.

1)

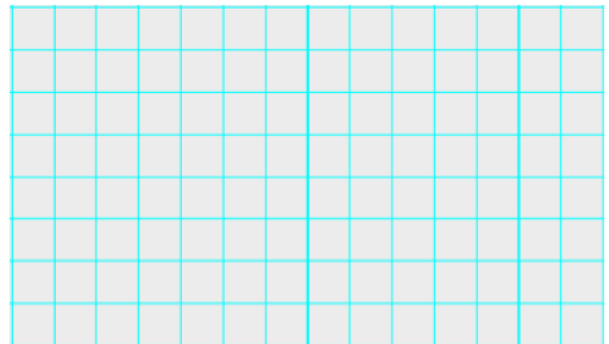
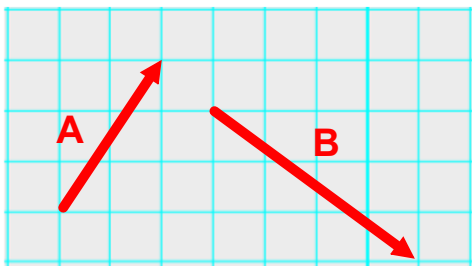


Vector	Horizontal Component	Vertical Component
A		
B		
R		

Magnitude of R (Pythagorean theorem):

Direction of R (SOH CAH TOA):

2)

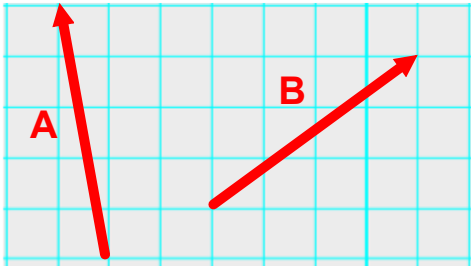


Vector	Horizontal Component	Vertical Component
A		
B		
R		

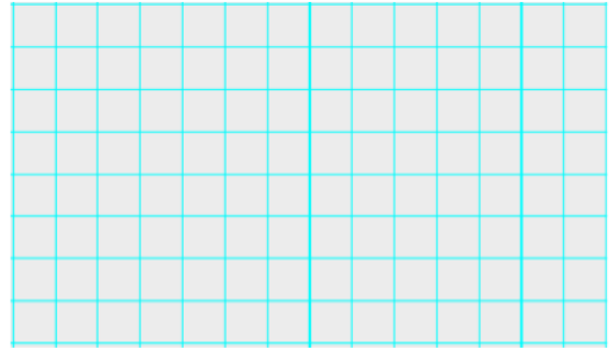
Magnitude of R (Pythagorean theorem):

Direction of R (SOH CAH TOA):

3)



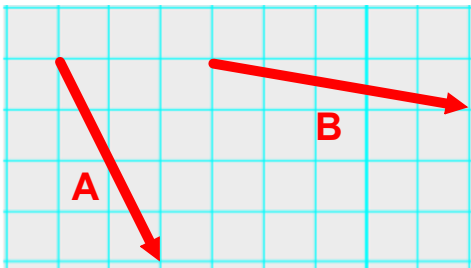
Vector	Horizontal Component	Vertical Component
A		
B		
R		



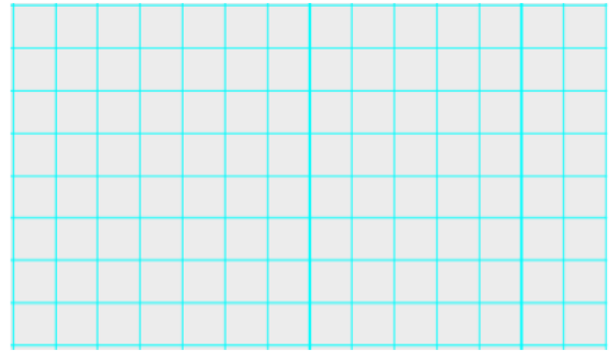
Magnitude of R (Pythagorean theorem):

Direction of R (SOH CAH TOA):

4)



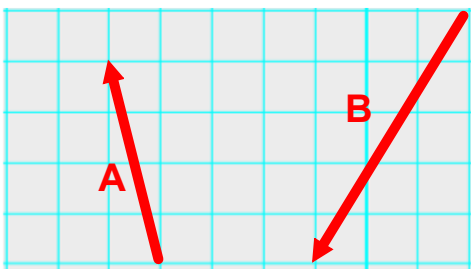
Vector	Horizontal Component	Vertical Component
A		
B		
R		



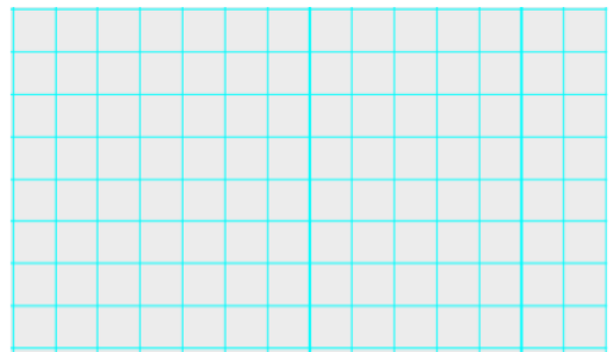
Magnitude of R (Pythagorean theorem):

Direction of R (SOH CAH TOA):

5)



Vector	Horizontal Component	Vertical Component
A		
B		
R		



Magnitude of R (Pythagorean theorem):

Direction of R (SOH CAH TOA):