

4.2 Vector Addition

4.2 I can add and subtract vectors graphically.

4.3 I can add and subtract vectors using the component method.



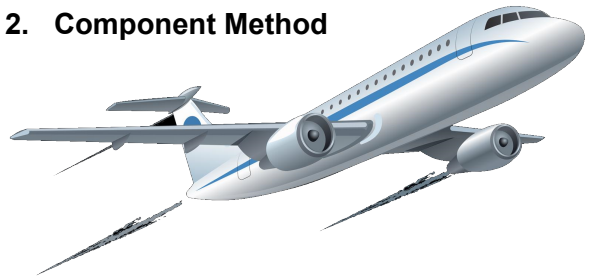
Every vector can be broken into 2 components

To add vectors graphically, we use the head-to-tail technique.



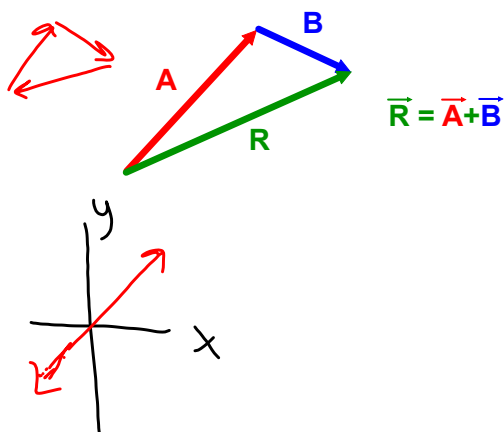
2 Methods of Adding Vectors

1. Graphical Method
 - « Head-to-Tail Addition
2. Component Method



Graphical Method: Head-to-Tail Addition

Adding vectors graphically: Place the tail of the second at the head of the first. The sum points from the tail of the first to the head of the last.

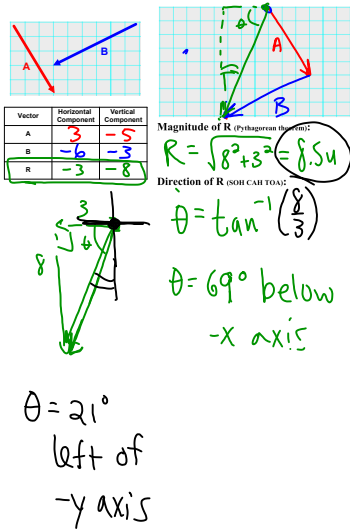


Component Method

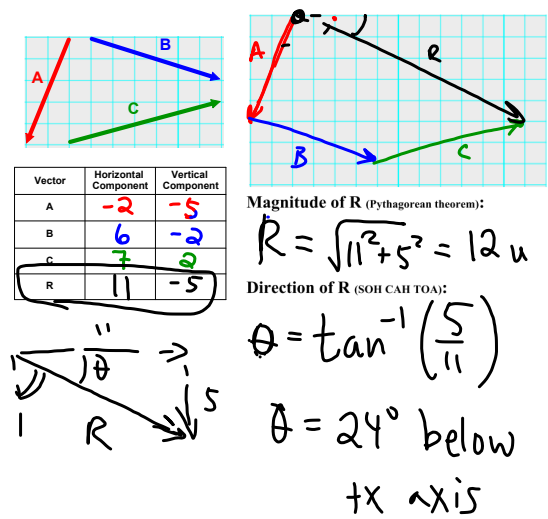
Adding Vectors Using Components:

1. Find the components of each vector to be added.
2. Add the x- and y-components separately.
3. Find the resultant vector.

Example 1: Vector Addition



Example 2: Vector Addition



HOMWORK

Worksheet