Same Plane

Vector Addition

\*\*Remember vectors (velocity, acceleration) require a direction and scalars (speed and mass) do not.

**Vector additions: happen when two objects interact due to a force or some kind of motion created by two or more vectors.**

**Example:**

**If a car traveling 55 mi / hr East was rear ended by another traveling 65 mi / hr East, how fast would the car that was rear ended be traveling after the collision?**

**65 mi / hr. 55 mi / hr.**

**When the two interacting vectors are on the same plane, you can simply add or subtract the two vectors.**

**65 mi/hr. + 55 mi/hr. = 120 mi / hr. East**

**When do you think you would subtract?**

**When the vectors are traveling in opposite directions.**