

Vector Notes

_____ → **Vector**

_____ **Scalars**

A quantity with both _____ & _____.

A quantity with ONLY _____

=> Examples – _____, _____, _____, Force

=> Examples - _____, _____, _____.

Vectors

▶ Represented by _____



▶ Add by placing arrows _____ to _____



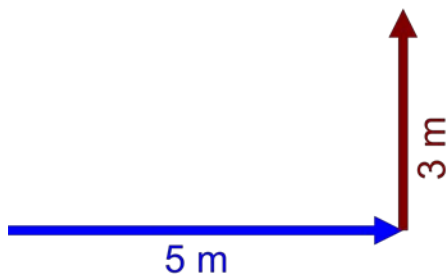
▶ Same with _____ vectors



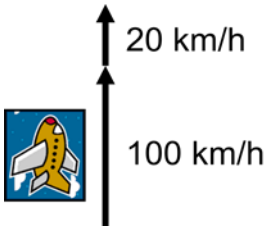
▶ _____ - An arrow that goes from the _____ of the _____ vector to the _____ of the _____ vector

❖ Indicates both the _____ & _____ of the vector sum

❖ Examples:



Magnitude Work:
Direction Work:



An airplane flies north with the throttle set to fly at 100 km/h and the wind is also blowing north at 20 km/h. How fast is the plane going?

20 km/h



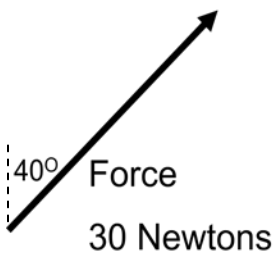
100 km/h

Magnitude Work:

Direction Work:

Vector Components - Because a vector has both magnitude and direction, you can separate it into

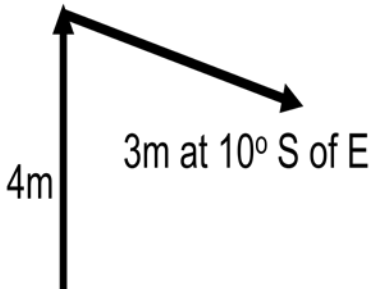
_____ & _____ components.



F_y Work:

F_y Work:

Last Example:



Disp.	x	y
4		
3		
Totals		

Magnitude Work:

Direction Work: