

Scalar quantities:	require magnitude & unit for complete description
Exampl	es: mass, time, temperature, speed, (what others?)
	2.7 kg
	57 °Č
	60 <i>m/s</i>
Vector quantities	: require magnitude, unit & <u>direction</u> for complete description
Exampl	es: displacement, velocity, acceleration (what others?)
	500 m north
	50 m/s heading 040°
	9.8 m/s^2 down















Example		
N Vor Vor Vor Vor Vor Vor Vor Vor Vor Vor	At what angle do you point the boat to go straight across the river? v_{br} : speed is 20 m/s, direction ??? v_{re} : current, 10 m/s, due east v_{be} : speed is ???, due north Vector equation: $V_{be} = V_{br} + V_{re}$ In components:	
East: (v	$(v_{br})_x + (v_{re})_x = (v_{be})_x$ 20 m/s sin(θ)+10 m/s = 0> θ =30°	
North: (* 5/24/01 2	$(v_{br})_y + (v_{re})_y = (v_{be})_y$ $0 \text{ m/s} \cos(30^\circ) + 0 \text{ m/s} = (y_{be})_y = 17 \text{ m/s}$	