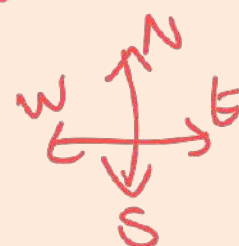


Scalar vs. Vector

number + unit
5.2 miles

number + unit +
direction
5.2 miles south

+/- up/down
right/left



angle

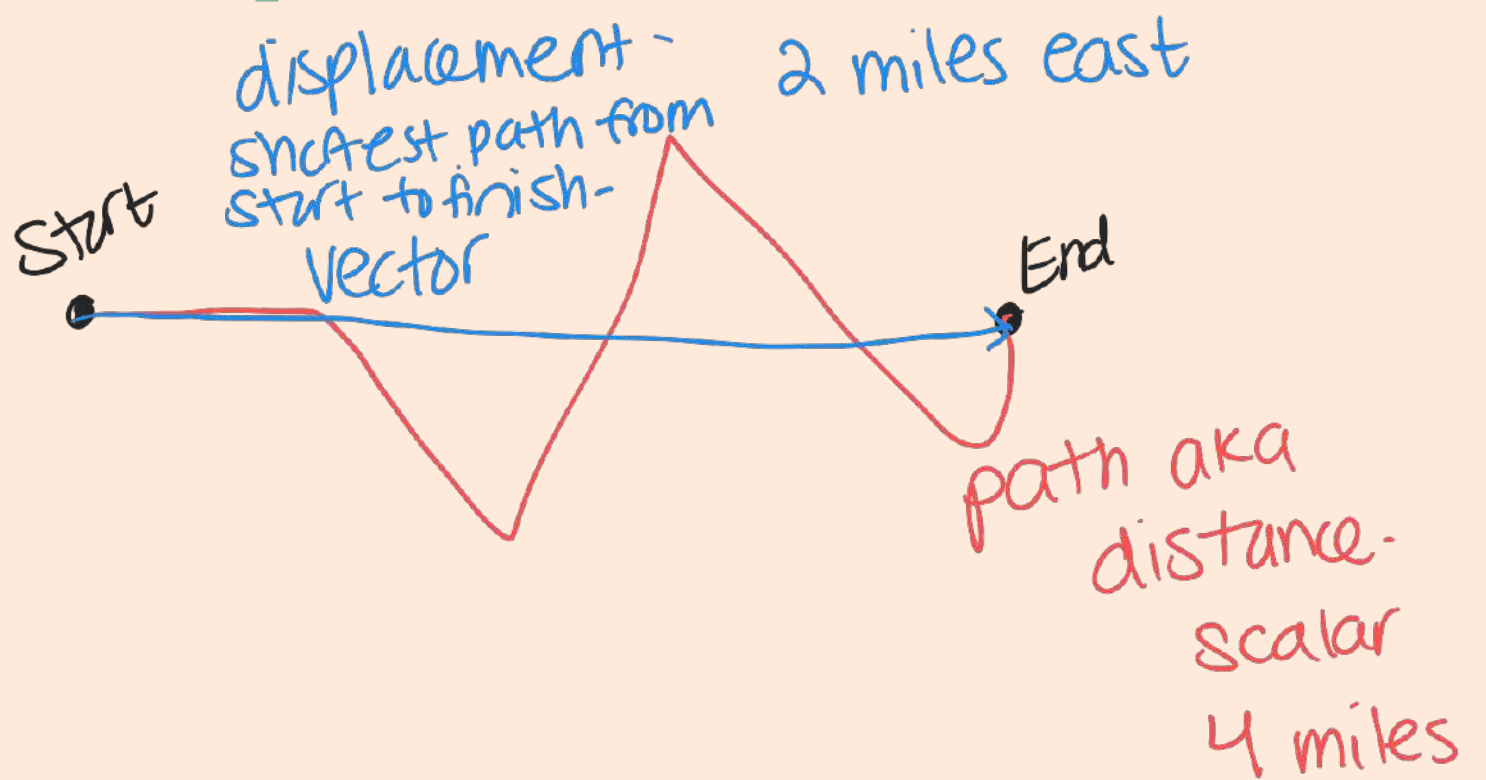


Scalar vs. Vector

- 10 mph *S*
- 20 m/s east *V*
- +70 miles *V*
- 70 miles *S*
- -70 miles *V*
- 100 km 34 degrees SE *V*



Distance vs. Displacement





Practice



1. A $\rightarrow$ B 3 m, 3 m $\uparrow$
2. A $\rightarrow$ B $\rightarrow$ C $\rightarrow$ D 11 m, 5 m $\rightarrow$
3. A $\rightarrow$ B $\rightarrow$ C $\rightarrow$ D $\rightarrow$ A 16 m, 0 m
4. A $\rightarrow$ D $\rightarrow$ C $\rightarrow$ B 11 m, 3 m $\uparrow$
5. A $\rightarrow$ D 5 m, 5 m $\rightarrow$
6. A $\rightarrow$ D $\rightarrow$ C 8 m

