

1. Using a scaled diagram, draw the following vector addition problem. Measure, and write out the final answer.

- a. A bug walks 5cm East, then 10cm East.

Scale:

Direction:

- b. A butterfly flies 90cm North, then 50cm South.

Scale:

Direction:

- c. A dog runs -80m[E], then runs 20m[W].

Scale:

Direction:

- d. A car travels South for 2km, then West for 5km. Find  $\Delta d_T$

Scale:

Direction:

- e. A cyclist travels North for 5km, then West for 4km. Find  $\Delta d_T$

Scale:

Direction:

- f. A sailboat moves 800m [S15°E], then moves in a different direction, floating 600m [S45°W]. (draw this one on the back)