

### Relative motion Work sheet

Load Relative motion program and go to *File*→*Question*→*Worksheet #1* for full or partial solution

1) A Cessna is flying at 120 km/h [N30°E], If the wind has a velocity of 45 km/h [S60°E] Where is the plane after 4 hours?

2) A kayaker heads up stream at an angle of 60° from the shore with a speed of 6 m/s. If the rivers current is 3 m/s, where does he end up if river is 50 m wide?

3) A Kayaker wants to end up directly across a 100 m wide river. If the current is 2 m/s and the kayaker can paddle at 5 m/s, what direction should the paddler head? How long does it take for paddler to head across river?

4) Make up your own relative motion question and save the solution so others can check their solution.