

Name _____

Flight Plan Activity Sheet

Pilots must fill out a standard flight plan before leaving the airport. They must identify the aircraft and give the departure point and time, cruising altitude, route of flight, destination, estimated time en route, and fuel on board.

An airplane has enough fuel for 3 hours of safe flying. On the trip out, the pilot averages 200 mph flying against a headwind. On the trip back, the pilot averages 250 mph. How long a trip out (hours and miles) can the pilot make?

The flight paths are graphed below. Working as a team, use the graph to write the system of equations that represents the flight paths, and then use the equations to solve for the length of the trip.

Working separately, one team member solves the equations using the graphing calculator, one using substitution, and one using elimination.

When each team member has finished, compare your solutions.

