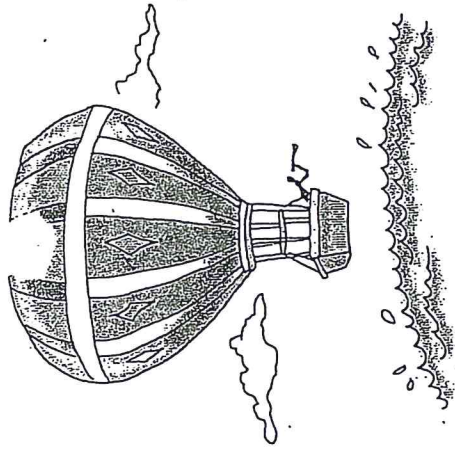
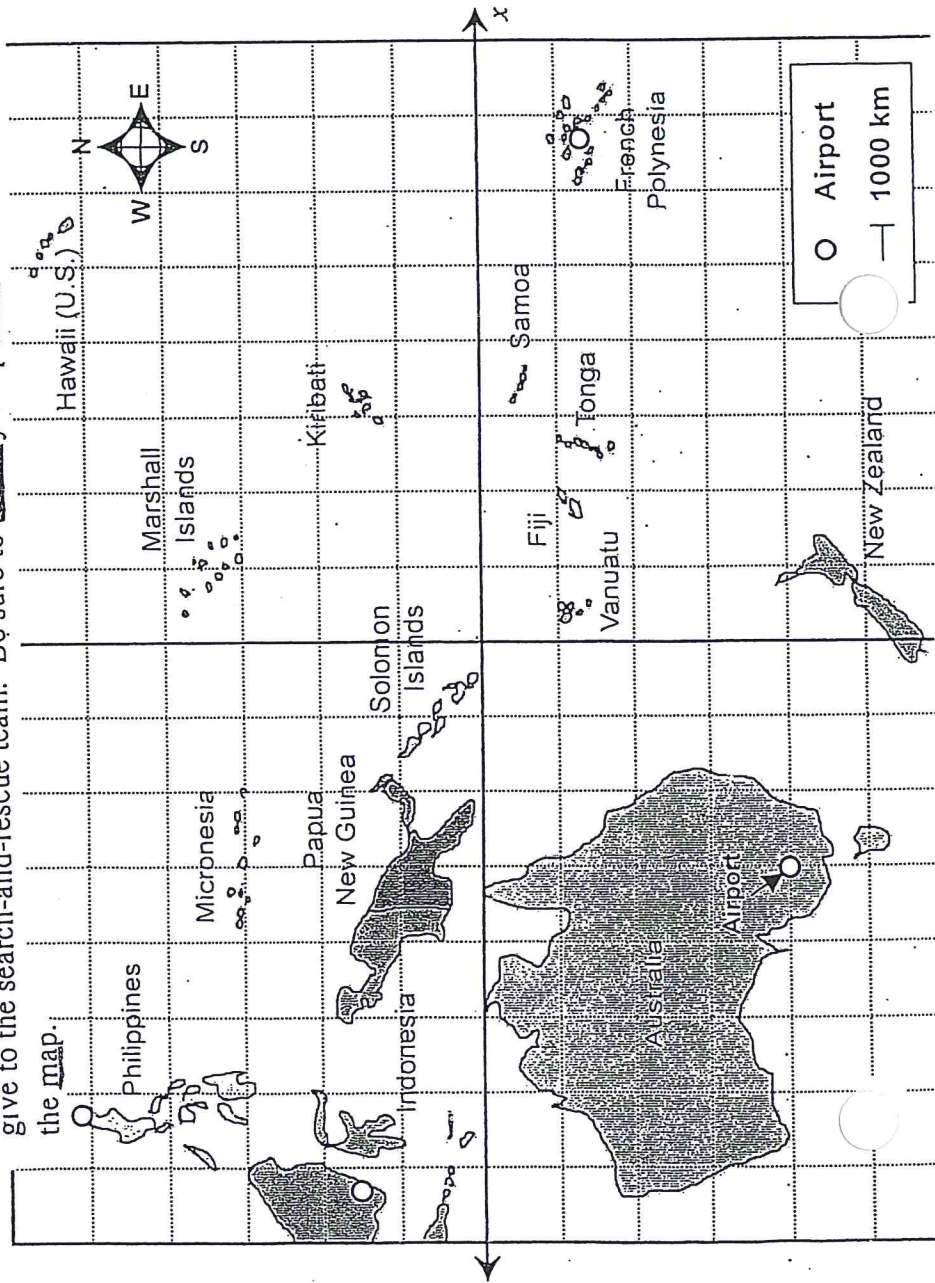


SEARCH AND RESCUE

"I'm completely lost... water everywhere I can see... both engines have failed... Wait! I see land. I'm going to try to land. I think it's..."

Those were the last words heard from Harold in his hot-air balloon. The last time the balloon showed up on radar, it was near the Solomon Islands in the Pacific Ocean.

Your Task: Your team must determine where to send the search-and-rescue teams! Use the following reports along with the map on the Lesson 9.3.2 Resource Page (also available at www.cpm.org) and look carefully for information that will help you draw boundary lines. Write a system of inequalities to give to the search-and-rescue team. Be sure to identify the probable landing site on the map.



Name _____

Basic facts of the case:

The balloon departed from the airport at the very northern tip of the Philippines. The flight was supposed to follow a straight path *directly* to an airport in French Polynesia.

The balloon's last known location was at (~1000, 1000) near the Solomon Islands.

Phone call received today:

"I was a passenger on a flight that flew directly from French Polynesia to Indonesia. I was looking out my window when I saw the balloon going down to the north of where we were flying."

Pilot's report from a nearby airplane:

"We were on our way from Australia, when we saw a hot-air balloon sinking rapidly. I am certain that it crashed south of our flight path. When we left Australia, we traveled 2000 km north for every 3000 km east that we flew."