## Kwantlen Polytechnic University

## Mathematics Problem of the Week

Problem number 232
Posted Monday September $8^{\text {th }} 2014$
Submit by noon, Monday September $15^{\text {th }} 2014$

A plane carrying a group of adventures on a flight into the mountains has crashed. They have lots of food and water but all their communication devices have been destroyed in the wreck. As well several of them have lost their boots and cannot walk any distance. They want to send
 someone to the nearest village which is an eight day journey from the crash site. One person can only carry five days worth of food and water. How many must leave the crash site so that at least one person can make it safely to the village? Each person must survive (so each must either make it to the village or back to the crash site without running out of food and water). Describe how they will make the trip.

