## Jedi Knights

There are three Jedi Knights and three Storm Troopers who need to get from the planet Alderaan to the planet Tatooine. They have a spaceship to carry them, but it can only hold two people at a time. All of the Jedi and Storm Troopers are capable of piloting the spaceship. The problem is that if the Storm Troopers outnumber the Jedi, they'll pick a fight and get themselves killed. The Jedi will not kill the Storm Troopers if they outnumber them. How can you get all six of them safely to Tatooine?



Alderaan



Tatooine

## **Extensions:**

After a battle, a Jedi Knight from the Old Republic, a Wookie, and two droids (C3PO and R2D2) are left stranded on the bridge of a damaged Imperial cruiser. They have 17 minutes to get off the bridge before it is engulfed in flame. The corridor leading from the bridge is in total darkness and so structurally weak that it will only hold two at a time. Using the Jedi's light saber as the light source, can all be rescued?

- The Jedi Knight can travel the corridor in 1 minute.
- The Wookie in 2 minutes.
- R2D2 in 5 minutes.
- The C3PO in 10 minutes.

Hint: Under usual conditions, no Jedi Knight would give his light saber to a Wookie or a droid, but...





Jedi Knights reworked with a Hawaiian theme...



Jedi Knights were replaced by farmyard animals, but the math was the same...

## The Math in This Problem:

This math puzzle presents students with the problem of orders and combinations, which are fundamental principles in the realm of probability and statistics. Developing an understanding of this simple conundrum will serve as an introduction to these extensive areas of mathematics.

