

Surviving the Titanic

On April 15, 1912 the supposedly unsinkable H.M.S. Titanic struck an iceberg and sunk in the North Atlantic Ocean. There is some doubt about the actual number of lives lost but it is agreed that over 1,500 of the over 2,200 persons on board perished. Passengers were classified as either First, Second or Steerage Class. In addition to the passengers on the ship there were also the crew members.

	Crew	First	Second	Steerage	Total
Saved	214	199	119	174	706
Lost	685	130	166	536	1517
	899	329	285	710	2223

- Probability
 - Probability of being saved?
 - Probability of being lost?
- Conditional Probability
 - Probability of being saved, given you were in first class?
- Probability Rules
 - Addition Rule – Probability of saved **or** first class?
 - Multiplication Rule – Probability of saved **and** first class?
- Mutually Exclusive (Disjoint) Events
- Independent Events