

# RISK – ANSWER SHEET



## TASK B

Next we need to calculate the MicroMorts for each of these activities. Put your results in the table and re-rank the activities according to the risk.

1. From 1975 to 2004 there were a recorded 26 sudden death cardiac arrests from 3,292,268 marathon runners in the USA. Calculate this risk of a sudden death cardiac arrest from taking part in a marathon in MicroMorts.

$$\frac{26}{3,292,268} \times 1,000,000 = 7.897 \dots \approx 8MM$$

2. The US Parachute Association recorded that for the years 2000 to 2010 inclusive, 279 people were killed in parachute accidents. During this time an average of 2.6 million jumps were made per year. Calculate the risk per jump in MicroMorts.  
HINT: The 279 deaths were over a period of 11 years!

$$\frac{279}{2.6 \times 11} = 9.755 \dots \approx 10MM$$

3. In the 12 years, from 1998 to 2009, the British Sub-Aqua Club recorded 197 deaths. They estimate that an average of 2 million dives take place per year. Calculate the risk per dive in MicroMorts.

$$\frac{197}{2 \times 12} = 8.208 \dots \approx 8MM$$

4. Between 1990 and 2006, of 20,000 people climbing above 8,000 metres in the Himalayas, an estimated 238 people died. How many MicroMorts per climb over 8,000 metres is this?

$$\frac{238}{20,000} \times 1,000,000 = 11,900MM$$

5. It was recorded that over 11 years, 9 people died from BASE jumping the Kjerag Massif in Norway (1,000 metre drop). There were an estimated 20,850 jumps in this time. How many MicroMorts is this per jump?

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$$\frac{9}{20,850} \times 1,000,000 = 431.654 \dots \approx 432MM$$

Activity	Running a Marathon (per marathon)	Parachuting (per jump)	Scuba Diving (per dive)	Climbing the Himalayan Mountains (per climb over 8,000m)	BASE Jumping
MicroMorts	8	10	8	11,900	432
Rank	4th	3rd	4th	1st	2nd

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