

BASIC MAP CALCULATIONS

SCALE

Think in METRES (Kilometres / Metres / Centimetres / Millimetres)

1: 25, 000 = 1cm on the map is equal to 25, 000 cm on the ground

1: 50, 000 = 1cm on the map is equal to 50, 000 cm on the ground

1 : 25, 000		1 : 50, 000	
GROUND	MAP	GROUND	MAP
1000 m (1 km)	1 square (4 cm)	1000 m (1 km)	1 square (2 cm)
500 m (½ km)	20 mm (2 cm)	500 m (½ km)	10 mm (1 cm)
250 m (¼ km)	10 mm (1 cm)	250 m (¼ km)	5 mm (½ cm)
50 m	2 mm	50 m	1 mm

SPEED

	1000 m	500 m	250 m	100 m
1 km per hour	60 min	30 min	15 min	6 min
2 km per hour	30 min	15 min	7½ min	3 min
3 km per hour	20 min	10 min	5 min	2 min
4 km per hour	15 min	7½ min	3¾ min	1½ min
5 km per hour	12 min	6 min	3 min	1 min (ish)

The average expedition group (with a pack) should aim to walk at 3km per hour. A non-expedition group (without a pack) should aim to walk at 4km per hour.

HEIGHT CLIMBED

For every 10m of height climbed you should add 1 minute to your overall time.

REST PERIODS

For every 1 hour you are walking, you should add 10 minutes to your overall time. This makes up for time lost, with drink stops, tie bootlaces etc. Extra time should be added if an 'official' break (i.e. lunch) is required.