

MATHEMATICS ANSWERS

Level One

Time and Links

Task A

1.

UTC (Greenwich)	Sydney
a. 20:00 3 rd May 2001	06:00 4 th May 2001
b. 00:00 19 th June 2001	10:00 19 th June 2001
c. 10:45 22 nd September 2001	20:45 22 nd September 2001
d. 07:05 1 st October 2001	17:05 1 st October 2001
e. 15:00 31 st December 2001	01:00 1 st January 2002

2.

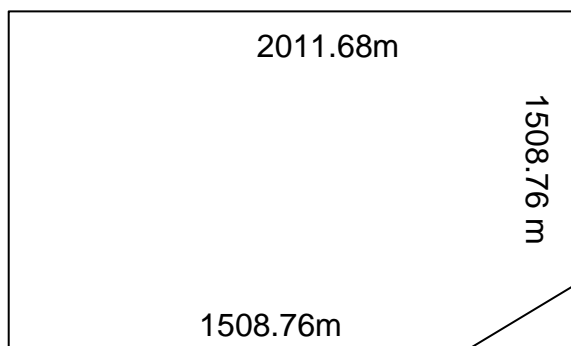
UTC (Greenwich)	New Zealand
a. 18:30 8 th September 2002	06:30 9 th September 2002
b. 01:45 18 th November 2002	13:45 18 th November 2002
c. 07:25 5 th April 2002	19:25 5 th April 2002
d. 04:37 23 August 2002	16:37 23 August 2002
e. 17:00 31 st December 2001	05:00 1 st January 2002

Task B

10000 links = **2011.68m**

7500 links = **1508.76m**

8500 links = **1709.93m**

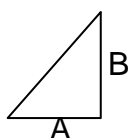


Whole rectangle area

= 2011.68 x 1709.93m

= **3439831.98m²**

Corner triangle area:



$B = 1709.928 - 1508.76 = 201.168\text{m}$

$A = 2011.68 - 1508.76 = 502.92\text{m}$

Area = $\frac{1}{2}ba$

= $\frac{1}{2}(201.168 \times 502.92)$

= **50585.71m²**

Final area = total rectangle – corner triangle

= 3439827.959 – 50585.705

= **3389246.27m²**

Converted to hectares

= $3389246.27 \div 10000$

= **338.92ha**