

ES7 N5 Applications of Maths (Geometry & Measure)

Time Zones

Worked Solutions Courtesy of Mr R. Milton

Berlin	GMT +1.00	Moscow	GMT +3.00
Sydney	GMT +11.00	Windhoek	GMT +2.00
New York	GMT -5.00	Tokyo	GMT +9.00

① GLASGOW 0945

TOKYO GMT +9

9 HOURS AHEAD

$$0945 + 9 = \underline{1845} = 6:45 \text{ pm} \checkmark$$

② ABERDEEN 1417 (2:17pm)

NEW YORK GMT -5

5 HOURS BEHIND

$$1417 - 5 = \underline{0917} = 9:17 \text{ am} \checkmark$$

③ MANCHESTER 0341
moscow GMT + 3.00

3 HOURS AHEAD

$$\Rightarrow 0341 + 3 = \underline{0641} = \underline{6:41am}$$

④ LONDON 11:27am

WINDHOEK GMT + 2.00

2 HOURS AHEAD

$$11:27am + 2$$

$$= \underline{1327} = \underline{1:27pm}$$

⑤ NEWCASTLE 1903

SYDNEY GMT + 11.00

11 HOURS AHEAD

$$1903 + 11$$

$$= \underline{0603} = \underline{6:03am (NEXT DAY)}$$

⑥ GMT MOSCOW TOKYO
 2:55pm $\xrightarrow{+3}$ 5:55pm
 2:55pm $\xrightarrow{+9}$ 11:55pm. ✓

⑦ NY GMT BERLIN
 6am $\xleftarrow{-5}$ 11am $\xrightarrow{+1}$ 12 NOON
1200 ✓

⑧ 1:25pm - 6 hours = 7:25am ✓
 (0725)
 NEW YORK

⑨ GMT WINDHOEK
 0815 $\xrightarrow{+12}$ 1015
 0815 $\xrightarrow{+3}$ 1115 ✓

(10) NY GMT SYDNEY
1:13am ← ⁻⁵ 6:13am → ⁺¹¹ 5:13pm
0113
 ✓

NEW YORK IS 16 HOURS
 BEHIND SYDNEY

AQ

FLIGHT TOGIC OFR AT 1150 + 47MIN
 = 1237 [UK TIME]

1237 [UK TIME] = 1337 [BERLIN TIME]

1542 - 1337 = 2 HOURS 5 MINS

THE FLIGHT WAS 2 HOURS 5 MINS ✓