

Time

Mark Scheme 2

Level	IGCSE
Subject	Maths (0580)
Exam Board	Cambridge International Examinations (CIE)
Paper Type	Extended
Topic	Number
Sub-Topic	Time
Booklet	Mark Scheme 2

Time Allowed: 40 minutes

Score: /33

Percentage: /100

Grade Boundaries:

A*	A	B	C	D	E	U
>85%	75%	60%	45%	35%	25%	<25%

1	(a) 06 41	1	Allow 6.41(am). 6:41 and 06:41 Not 6h41m or 641h or 6.41pm
	(b) \$204	1	

2	(a) 2h 55m (b) 52.8	1 2*	M1 154 ÷ (a) in hours or M1 154 x 60 / their "175"
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3	(a) (-)96	2*	B1 answers in the range 90 to 100 or 1.5 to 1.7
	(b) 0	1	

4	3h 20m	1	
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5	<p>(a) (i) $5480^2 + 3300^2 - 2 \times 5480 \times 3300 \times \cos 165$ 8709.5..</p> <p>(ii) $(\sin L =) \frac{\sin 165}{8710} \times 3300$ (0.09806...)</p> <p>5.6 (5.62 to 5.63)</p> <p>(b) 22 35 or 10 35 pm</p> <p>(c) $8710 \div 800$ 10.88 to 10.9 with no conversion to h/min or 10 (hrs) 52 (mins) to 10 (hrs) 54 (mins) oe 13 hrs 45 mins – their time in hrs and mins oe or 13.75 – their decimal time and a correct conversion to hrs and mins or minutes 2 hr 52 mins cao</p>	<p>M2</p> <p>E2</p> <p>M2</p> <p>A1</p> <p>2</p> <p>M1</p> <p>A1</p> <p>M1</p> <p>A1</p>	<p>(75 856 005) M1 for implicit version</p> <p>If E0, A1 for 75800000 to 75900000</p> <p>M1 for $\frac{\sin L}{3300} = \frac{\sin 165}{8710}$ oe (allow 8709.5.) Could use cosine rule using 8710 or better – M2 for explicit form or M1 for implicit form (allow 5.6 to 5.63 for A mark)</p> <p>www3</p> <p>Accept 22 35 pm B1 for 15 35 or 3 35 pm seen or answers 22h 35 mins or (0)8 35(am) or 10 35(am)</p> <p>Implied by correct final ans 2hrs 52 mins if not shown</p> <p>Dep on first M1 e.g. 13 hrs 45mins – 11 hrs 29 mi or 13.75 – 10.9 then 2hrs 51 mins</p> <p>www4 (2 hrs 51.75 mins)</p>
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6 (a)	144:96 <u>Final</u> answer 3:2 or 1.5:1 or 1:0.667	B1 B1 (2)	After B0 , allow SC1 for <u>reversed</u> "correct" final ans. www2
(b) (i)	32 (children)	B1	
(b) (ii)	54 (adults off)	B1	
(b) (iii)	110 (adults on)	B1	
(b) (iv)	26 (=x) w.w.w.	B1 (4)	
(c)	$300 \times \frac{4}{\text{thier}(6+5+4)}$ 80 children	M1 A1 (2)	www2
(d) (i)	<u>Final Ans.</u> 21 13 or (0)9 13 pm	B1	Condone hrs but hrs and <u>minutes</u> ⇒ BO
(d) (ii)	7 h 20 min (o.e) $\times \frac{10}{110}$ (or $\times \frac{100}{110}$) 40 min	M1 A1 (3) (11)	Implied by 6 h 40 min or 400 min www2

