Assessment in IGCSE Mathematics 0580

Session 2: Handout 2.16(c)

The actual mark scheme used by CIE for this question.

Mark Scheme	Marks	Notes
(a) $(AC^2) = 9.5^2 + 11.1^2 - 2 \times 9.5 \times 11.1 \cos 70$	M2	Allow M1 for $\frac{9.5^2 + 11.1^2 - AC^2}{2 \times 9.5 \times 11.1}$
Square root of correct combination	M1	Dependent on previous M2
11.9 (cm)	A1	
(b) Opp angles of a **cyclic quadrilateral**	B1	Condone 180 – 70 o.e.
(c) 70 – 37 attempted s.o.i.	M1	e.g. 32 or 34 or 43 but be convinced
$\frac{AD}{\sin 33} = \frac{their(a)}{\sin 110}$	M1	Dependent on M1
(AD =) $\frac{their(a) \times \sin 33}{\sin 110}$	M1	Dependent on M2
art 6.89 or 6.90 (cm)	A1	NB: scale drawing scores zero

Codes used – M – method mark A – accuracy mark B – independent mark
o.e. – or equivalent art – answer rounds to

Actual marks which should given for these answers.

Student 1

Misread case of 11 for 11.1 throughout.

(a) M3 A1
(b) B1
(c) M3 A0 – slip of 43 for 33 allowed for method.
MR – 1 means one mark deducted from the A marks earned for the misread.

Student 2

(a) 4 for correct answer with no wrong working seen.
(b) B0 – wrong reason.
(c) 4 for correct answer.

Student 3

(a) M2 M0 – error in processing the formula but earns the first two methods for correct substitution.
(b) B1
(c) M3 – correct method with their wrong value from part (a).

Student 4

(a) M3
(b) B1
(c) M3
Student has used RADS throughout the question and loses the accuracy marks but method is fine.

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