

**Assessment Schedule – 2008****Mathematics: Solve straightforward trigonometric equations (90292)****Evidence Statement**

	Assessment Criteria	No.	Evidence	Code	Judgement	Sufficiency
<b>ACHIEVEMENT</b>	Solve straight-forward trigonometric equations.	1(a)	$30^\circ, 330^\circ$	A	Both answers required for each question.	<b>ACHIEVEMENT:</b>  Two of Code A.  Replacement Evidence:  Any part of Questions 2, 3, 4.
		(b)	$164.36^\circ, 344.36^\circ$	A	OR equivalent.	
		(c)	0.1253, 3.0163	A	OR equivalent.	
					Degrees or radians accepted throughout.	
<b>ACHIEVEMENT WITH MERIT</b>	Solve trigonometric equations.	2	1.107, 2.034, 4.249, 5.176	A M	OR equivalent	<b>ACHIEVEMENT WITH MERIT:</b>  Achievement plus  2 of Code M  OR  all of Code M.
		3	$t = 1.78, 6.08$ Time = 4.3 days	A M	OR equivalent	
		4	13.572 and 22.428 = 8.86 hours $24 - 8.86 = 15.14$ hours	A M	OR equivalent (do not penalise premature rounding)	
<b>ACHIEVEMENT WITH EXCELLENCE</b>	Solve multi-step trigonometric problems.	5	Model $R = 1200 - 400 \sin\left(\frac{\pi t}{6}\right)$ $t = 7.62$ and $10.38$  Answer = 2.8 months	M  E	Must have clear explanation of the process being used to solve the problem.	<b>ACHIEVEMENT WITH EXCELLENCE:</b>  Merit plus Code E.

## Judgement Statement

Achievement	Achievement with Merit	Achievement with Excellence
Solve straight-forward trigonometric equations.  $2 \times A$	Solve straight-forward trigonometric equations.  Achievement plus  $2 \times M$  OR  all M	Solve straight-forward trigonometric equations.  Achievement with Merit plus  $1 \times E$

The following Mathematics-specific marking conventions may also have been used when marking this paper:

- Errors are circled.
- Omissions are indicated by a caret (^).
- **NS** may have been used when there was not sufficient evidence to award a grade.
- **CON** may have been used to indicate ‘consistency’ where an answer is obtained using a prior, but incorrect answer and **NC** if the answer is not consistent with wrong working.
- **CAO** is used when the ‘correct answer only’ is given and the assessment schedule indicates that more evidence was required.
- **#** may have been used when a correct answer is obtained but then further (unnecessary) working results in an incorrect final answer being offered.
- **RAWW** indicates right answer, wrong working.
- **R** for ‘rounding error’ and **PR** for ‘premature rounding’ resulting in a significant round-off error in the answer (if the question required evidence for rounding).
- **U** for incorrect or omitted units (if the question required evidence for units).
- **MEI** may have been used to indicate where a minor error has been made and ignored.