Assessment Schedule – 2007

Mathematics: Use coordinate geometry methods (90287)

Evidence Statement

	Assessment Criteria	No.	Evidence	Code	Judgement	Sufficiency
ACHIEVEMENT	Use coordinate geometry methods.	1	$\sqrt{73} = 8.544$	A	Or equivalent.	ACHIEVEMENT: TWO A Replacement from Q4 - Q6 need TWO different methods correct to gain achievement.
		2	(16,11)	A	Or equivalent.	
		3	$y - 5 = \frac{2}{3}(x - 2)$	A	Or equivalent.	
ACHIEVEMENT WITH MERIT	Solve problems involving coordinate geometry methods.	4	$\frac{7-k}{2-5} = \frac{k-7}{5-9}$ $k = \frac{19}{7} (2.71428)$	AM		ACHIEVEMENT WITH MERIT: THREE A plus TWO M OR THREE M
		5(a)	dist(OB) = $\sqrt{(5-0)^2 + (12-0)^2}$ = 13 dist(OA) = 13	A M	Must show working. Equivalent methods	
		5(b)	$m_{\overline{AB}} = -\frac{12}{8}$ $m \perp = \frac{2}{3}$ $y = \frac{2}{3}x$	A M	acceptable.	
ACHIEVEMENT WITH EXCELLENCE	Solve extended problems involving coordinate geometry methods.	6	$m = -\frac{4}{3}$ $m \perp = \frac{3}{4}$ point (0,5) lies on $4x + 3y = 15$ line \perp through (0,5) is $y = \frac{3}{4}x + 5$ Intersection of this line with $4x + 3y = 5$ is $(-1.6,3.8)$ $dist = \sqrt{(0 - 1.6)^2 + (5 - 3.8)^2}$ $= 2$	A M E	Must have supporting working and a logical argument.	ACHIEVEMENT WITH EXCELLENCE: MERIT plus E

Judgement Statement

Achievement	Achievement with Merit	Achievement with Excellence
Use coordinate geometry methods.	Solve problems involving coordinate geometry methods.	Solve extended problems involving coordinate geometry methods.
2 × A	$3 \times A plus 2 \times M$ or $3 \times M$	Merit plus 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 (A).
- 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.