

Ekurhuleni North	District Paper – Mathematics Paper 2 Grade 11 Marking Guideline	June 2023
<b>SOLUTION</b> <b>NB: Accept valid alternate solutions.</b> <b>Consistent Accuracy applies to the whole memo.</b>		
<b>QUESTION 1</b>		
1.1	$m_{HM} = \frac{6 - 4}{3 + 1}$ $= \frac{1}{2}$	✓ subs into formula ✓ answer
1.2	$R(x; y) = \left( \frac{3 + 4}{2}; \frac{6 + 1}{2} \right)$ $= \left( \frac{7}{2}; \frac{7}{2} \right)$	✓ Correct Substitution  ✓ Answer
1.3	$m_{HM} = m_{AP}$ $\tan \theta = \frac{1}{2}$ $\theta = 26,57^\circ$	✓ HM ⊥ AT ✓ Correct substitution ✓ Answer
1.4	<p>R is the midpoint of diagonal AH (Diags of a parm)            Let the coordinates of A be (x; y).</p> $\frac{-1 + x}{2} = \frac{7}{2}$ $x = 8$ $\frac{4 + y}{2} = \frac{7}{2}$ $y = 3$ <p>∴ A(8; 3)</p>	$\checkmark \frac{-1+x}{2} = \frac{7}{2}$ $\checkmark 8$ $\checkmark \frac{4+y}{2} = \frac{7}{2}$ $\checkmark 3$
1.5	$m_{AT} = \frac{1}{2} \text{ (parallel lines)}$ $y = \frac{1}{2}x + c$ <p>Sub T(4; 1)</p>	$\checkmark \text{Sub T(4; 1)}$ $\checkmark c = -1$

# Question Paper 2 Mathematics Grade 11 Nov December

**Siddappa N.Byrareddy**



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