

| Question | | Answer | Marks | AO | Guidance | |
|----------|-----|--|-------|-----|--|-----------------------------------|
| 1 | (a) | $AB^2 = 9.5^2 + 9.5^2 - 2(9.5)(9.5)\cos 25^\circ$ | M1 | 1.1 | Correct application of the cosine rule (or sine rule) or $2 \times 9.5 \sin(0.5 \times AOB)$ | Either in terms of AB or AB^2 |
| | | $(AB =)4.11 \text{ cm}$ | A1 | 1.1 | Reminder – correct answer without working is 2 marks; incorrect answer without working is 0 | 4.1123526... |
| | | | [2] | | | |
| 1 | (b) | $\text{Area} = \left(\frac{25}{360}\right)\pi(9.5)^2 - \frac{1}{2}(9.5)^2 \sin 25^\circ$ | M2 | 1.1 | If M0 then SC B1 for either term | |
| | | $= 0.619 \text{ cm}^2$ | A1 | 1.1 | Reminder – correct answer without working is 3 marks; incorrect answer without working is 0 | 0.61884656... |
| | | | [3] | | | |