

1		68.5	<p>B1 for angle $OAB = 90^\circ$ or angle $OCB = 90^\circ$, may be seen on diagram</p> <p>P1 for a process to find the length of AB or the length of $CB (= 10\sqrt{3})$ oe eg $10 \times \tan 60^\circ (= 17.3\dots)$ or the length of $OB (= 20)$, eg $10 \div \cos 60^\circ$</p> <p>P1 for a process (dep previous P1) to find the area of the triangle $OAB (= 50\sqrt{3})$ oe or area of triangle $OCB (= 50\sqrt{3})$ oe or area of kite $OABC (= 100\sqrt{3})$ oe</p> <p>P1 for a process to find the area of the sector OAC e.g. $\frac{1}{3} \times \pi \times 10^2 (= 104.7\dots)$, accept rounded or truncated to 3 significant figures or more</p> <p>A1 for 68.4 – 68.6</p>
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2	shown	<p>C1 for method to find area of semicircle, eg $\pi \times 10^2 \div 2 (= 50\pi)$</p> <p>C1 for method to find area of quarter circle, for $\pi \times 20^2 \div 4 (= 100\pi)$</p> <p>C1 for a complete method to find area shaded and area of square, eg $\pi \times 20^2 \div 4 - \pi \times 10^2 \div 2$ and 20×20</p> <p>C1 fully correct working leading to $\frac{\pi}{8}$</p>	<p>Can award first 3 marks if a value for π is used</p> <p>Working out to find the area of the shaded region must be shown</p>
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