

TOPIK : PERIMETER DAN LUAS

No	Peraturan Pemarkahan	Sub Markah	Jumlah Markah
1.	<p>a. Length of arc AB Length of arc CDE $= \frac{45^\circ}{360^\circ} \times 2 \times \frac{22}{7} \times 14 @= \frac{135^\circ}{360^\circ} \times 2 \times \frac{22}{7} \times 28$</p> <p>Perimeter $= 11 + 66 + 14 + 28$ $= 119 \text{ cm}$</p>	1 1 1	
	<p>b. Area of sector AOB Area of sector $OCDE$ Area of semicircle OFE $= \frac{45^\circ}{360^\circ} \times \frac{22}{7} \times 14^2 @= \frac{135^\circ}{360^\circ} \times \frac{22}{7} \times 28^2 @= \frac{1}{2} \times \frac{22}{7} \times 14^2$</p> <p>Area of the shaded region $= 77 + 924 - 308$ $= 693 \text{ cm}^2$</p>	1 1 1	6
2.	<p>a. $\frac{x^\circ}{3} \times 2 \times \frac{2}{7} \times 2.8 = 7.33$ $x = 7.33 \times \frac{3 \times 7}{2 \times 2 \times 2.8}$ $x = \frac{1.2}{2}$ $= 149.93$ ≈ 150</p>	1 1 1	
	<p>b. Luas bahagian kipas biru $= \left(\frac{1}{3} \times \frac{2}{7} \times 2.8^2 \right) - \left(\frac{1}{3} \times \frac{2}{7} \times 2.1^2 \right)$ $= 10.26 - 5.77$ $= 4.49 \text{ m}^2$</p>	1, 1 1	6
3.	<p>a. $\frac{180}{360} \times 2 \times \frac{22}{7} \times 14 \text{ atau } \frac{45}{360} \times 2 \times \frac{22}{7} \times 14$</p> <p>$14 + \frac{45}{360} \times 2 \times \frac{22}{7} \times 14 + 14 + \frac{180}{360} \times 2 \times \frac{22}{7} \times 14$</p> <p>83</p>	1 1 1	

	b. $\frac{180}{360} \times \frac{22}{7} \times 14^2$ atau $\frac{36}{360} \times \frac{22}{7} \times 14^2$ atau $\frac{45}{360} \times \frac{22}{7} \times 14^2$ $\left[\frac{180}{360} \times \frac{22}{7} \times 14^2 - \frac{36}{360} \times \frac{22}{7} \times 14^2 \right] + \frac{45}{360} \times \frac{22}{7} \times 14^2$ 323.4 atau $323\frac{2}{5}$ atau $\frac{1617}{5}$	1	
4.	a. $\frac{80}{360} \times 2 \times \frac{22}{7} \times 14$ $\frac{80}{360} \times 2 \times \frac{22}{7} \times 14 + 14 + 14$ $47\frac{5}{9}$ atau $47\frac{4}{9}$ atau 47.56	1 1 1	
	b. $\frac{80}{360} \times \frac{22}{7} \times 14^2 a$ $\frac{160}{360} \times \frac{22}{7} \times 3^2$ $\frac{80}{360} \times \frac{22}{7} \times 14^2 - \frac{160}{360} \times \frac{22}{7} \times 3^2$ $124\frac{2}{6}$ atau $124\frac{7}{6}$ atau 124.32	1 1 1	6
5.	a. $Perimeter = 22 \times 4$ $= 88$ $2f j = 88$ $j = 14$	1 1 1	
	b. $\frac{90}{360} \times \frac{22}{7} \times 10.5^2 - \frac{90}{360} \times \frac{22}{7} \times 6^2$ $58\frac{19}{56}$	1,1 1	6