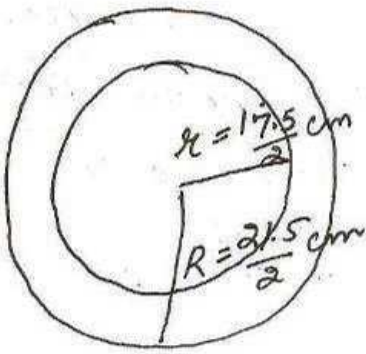


5



area to be painted

$$= \pi (R^2 - r^2)$$

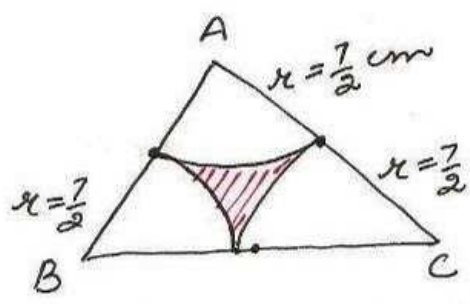
$$= \frac{22}{7} (10.25^2 - 8.75^2)$$

$$= \frac{22}{7} (10.25 - 8.75)(10.25 + 8.75)$$

$$= \frac{22}{7} \times 1.5 \times 19.5$$

$$= \frac{858}{7} \text{ m}^2$$

7



each side of equilateral  $\Delta$

$$= 3.5 + 3.5$$

$$= 7 \text{ cm}$$

reqd. area

$$= \text{ar}(\Delta ABC) - \text{ar}(3 \text{ sectors})$$

$$= \frac{\sqrt{3}}{4} s^2 - 3 \times \pi r^2 \frac{\theta}{360}$$

$$= \frac{\sqrt{3}}{4} \times 7 \times 7 - 3 \times \frac{22}{7} \times \frac{7}{2} \times \frac{7}{2} \times \frac{60}{360}$$

$$= \frac{49}{4} (\sqrt{3} - \frac{11}{7})$$

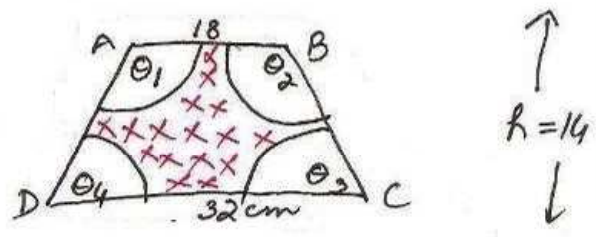
$$= \frac{49}{4} \frac{(7\sqrt{3} - 11)}{7}$$

$$= \frac{7}{4} (7 \times 1.73 - 11)$$

$$= \frac{7}{4} \times 1.11$$

$$= 1.9425 \text{ cm}^2$$

6



area of shaded region = ar (trap.) - ar (4 sectors)

$$= \frac{1}{2} (AB + CD) h + \frac{\pi r^2}{360} (\theta_1 + \theta_2 + \theta_3 + \theta_4)$$

$$= \frac{1}{2} (18 + 32) \times 14 + \frac{22 \times 7 \times 7}{7 \times 360} (360)$$

$$= 7(50 - 22)$$

$$= 7 \times 28$$

$$= 196 \text{ cm}^2$$