

$$3. \quad s = \frac{a+b+c}{2} = \frac{5+5+1}{2} = \frac{11}{2} = 5.5$$

$$s - a = 5.5 - 5 = 0.5$$

$$s - b = 5.5 - 5 = 0.5$$

$$s - c = 5.5 - 1 = 4.5$$

$$\begin{aligned} \text{Area} &= \sqrt{s(s-a)(s-b)(s-c)} \\ &= \sqrt{5.5 \times 0.5 \times 0.5 \times 4.5} \end{aligned}$$

$$= 0.5 \sqrt{5.5 \times 4.5}$$

$$= 0.5 \sqrt{24.75}$$

$$= 0.5 \times 4.97$$

$$= 2.48 \text{ cm}^2$$

$$\begin{aligned} \text{Area} &= L \times b \\ &= 6.5 \times 1 \\ &= 6.5 \text{ cm}^2 \end{aligned}$$

(i) and (iii) are right Δ s

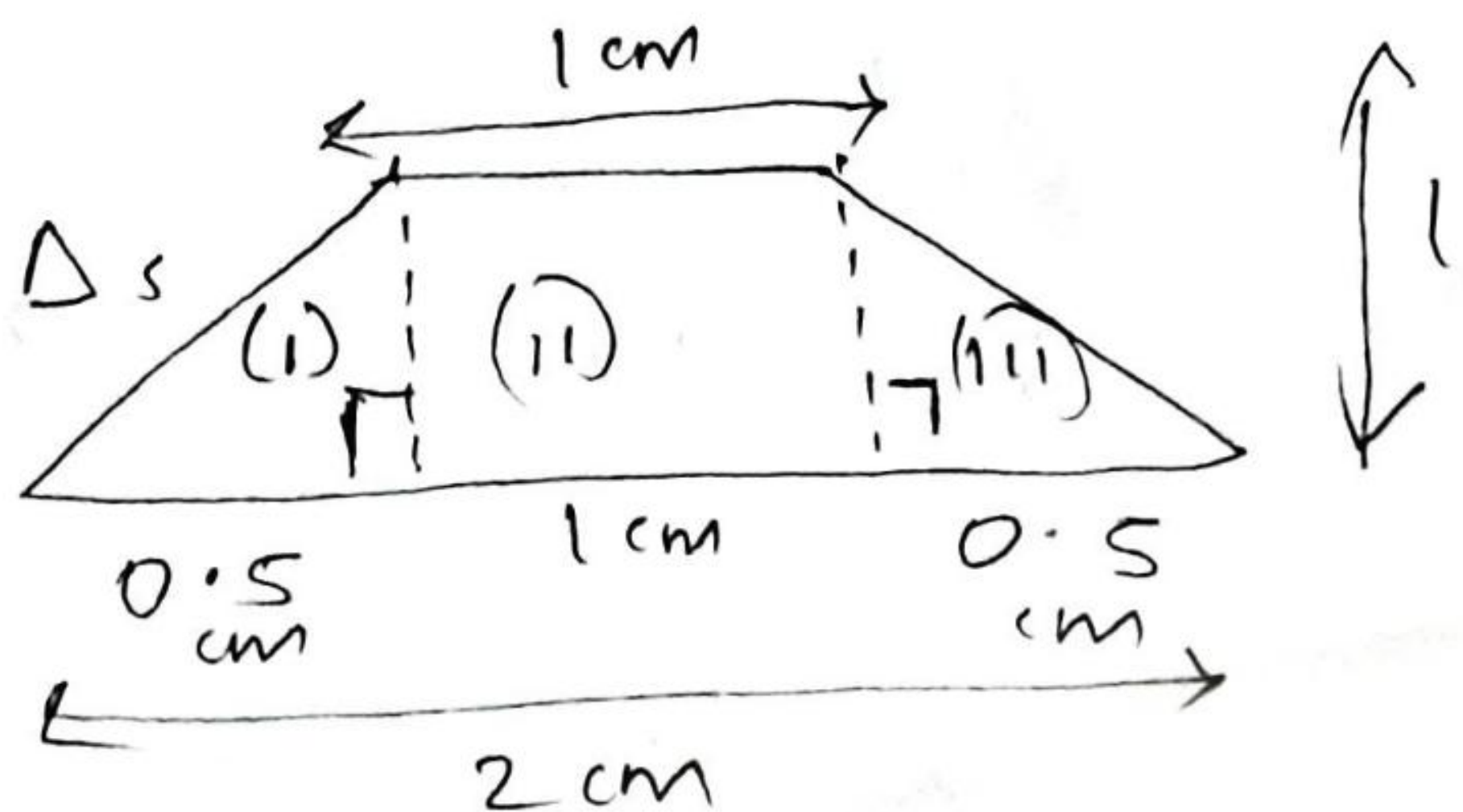
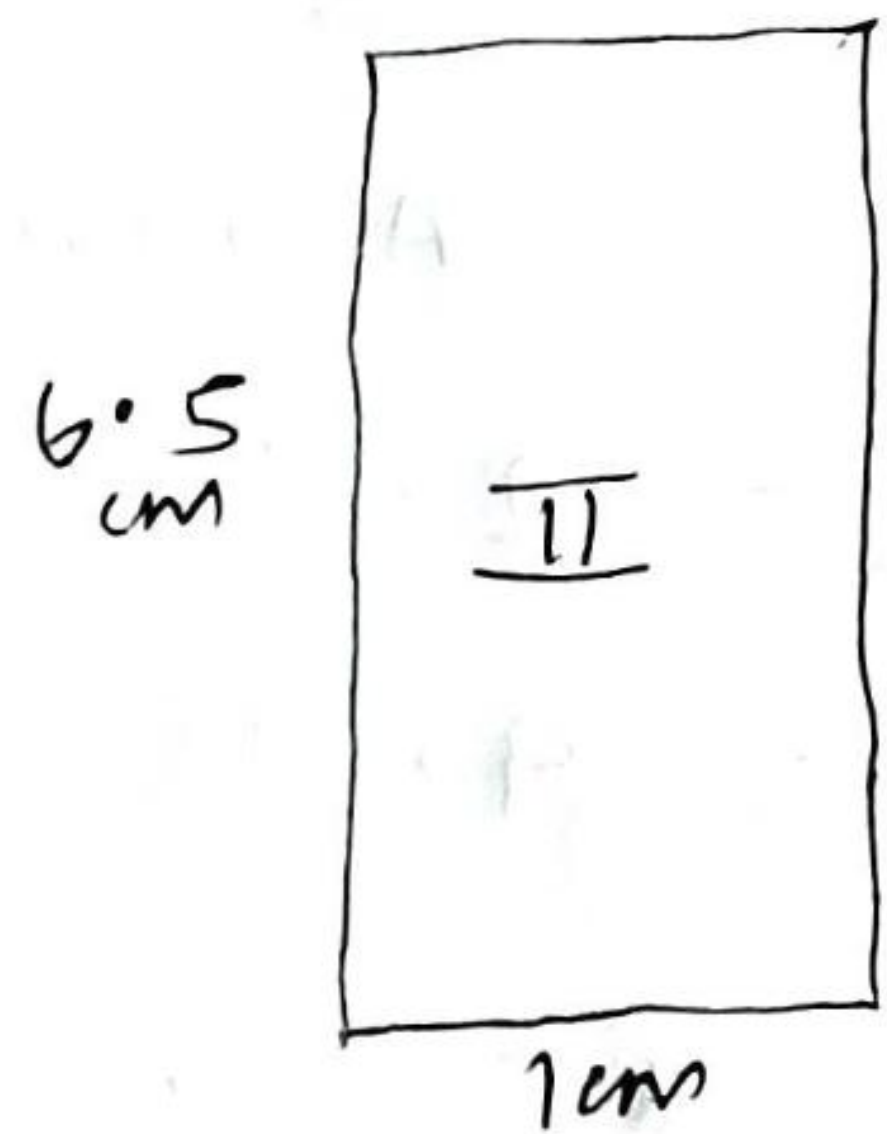
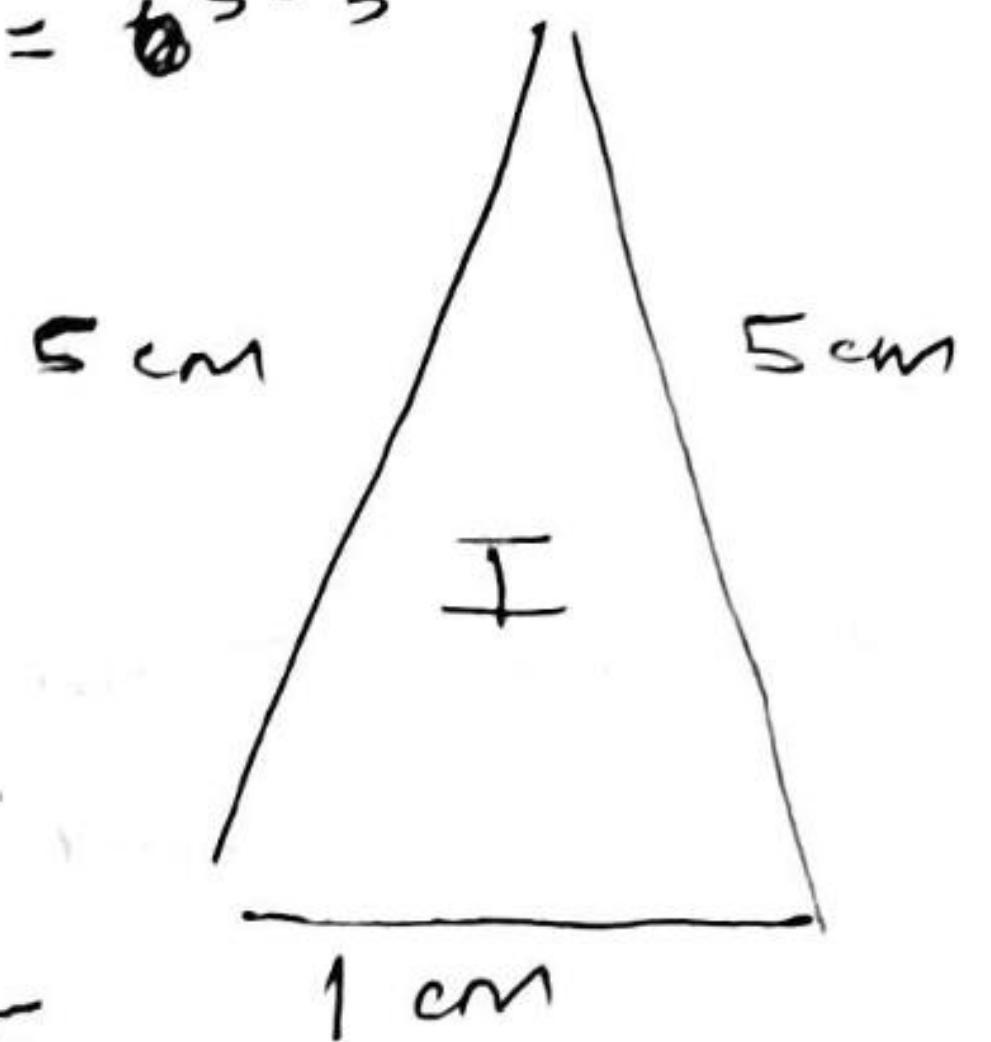
$$\frac{1}{2} \times 0.5 \times 1 \times 2$$

$$0.5 \text{ cm}^2$$

Area of (ii) rectangle

$$= 1 \times 1$$

$$= 1 \text{ cm}^2$$

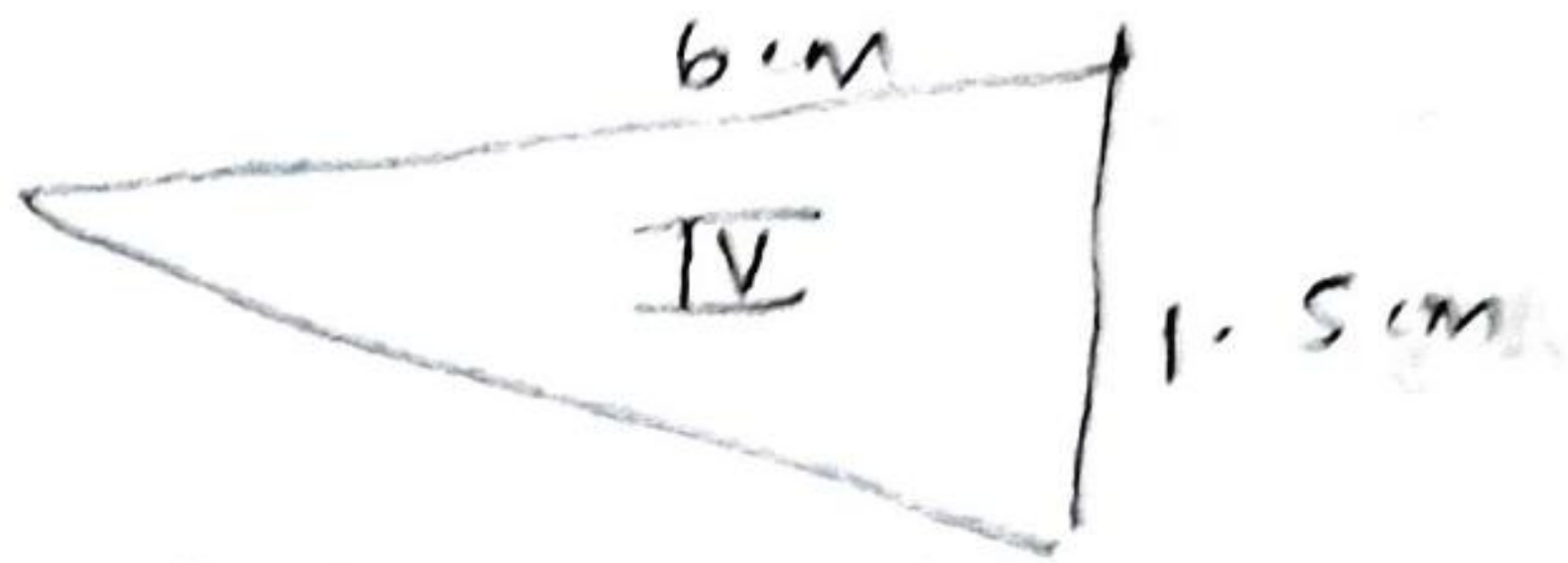


Area of (I), (II) and (III)

$$= 0.5 + 1$$

$$= 1.5 \text{ cm}^2$$

Area of IV and V
are same



$$\text{Area} = \text{IV} = \frac{1}{2} \times 6 \times 1.5$$

$$= 3 \times 1.5$$

$$= 4.5 \text{ cm}^2$$

Area of Aeroplane

$$= 2.48 + 6.5 + 1.5 + 4.5 + 4.5$$

$$= 19.48 \text{ cm}^2$$

4. $a = 26$

$$b = 28$$

$$c = 30$$

$$s = \frac{26 + 28 + 30}{2} = \frac{84}{2} = 42$$

$$s - a = 42 - 26 = 16$$

$$s - b = 42 - 28 = 14$$

$$s - c = 42 - 30 = 12$$

$$\text{Area} = \sqrt{s(s-a)(s-b)(s-c)}$$

$$= \sqrt{42 \times 12 \times 14 \times 16}$$

$$= \sqrt{7 \times 6 \times 6 \times 2 \times 2 \times 2 \times 4 \times 4}$$

$$= 7 \times 6 \times 2 \times 4$$

$$= 336 \text{ cm}^2$$

$$\text{If base} = 28 \text{ cm}$$

$$\text{Area} = 336 \text{ cm}^2$$

$$\begin{aligned} \text{Height of } \triangle &= \frac{336}{28} \\ &= 12 \text{ cm} \end{aligned}$$

Q. In $\triangle ABC$,

$$a = 48$$

$$b = 30$$

$$c = 30$$

$$s = \frac{a+b+c}{2} = \frac{30+30+48}{2} = \frac{108}{2} = 54$$

$$s - a = 54 - 48 = 6$$

$$s - b = 54 - 30 = 24$$

$$s - c = 54 - 30 = 24$$

$$\text{Area} = \sqrt{s(s-a)(s-b)(s-c)}$$

$$= \sqrt{54 \times 6 \times 24 \times 24}$$

$$= \sqrt{9 \times 6 \times 6 \times 24 \times 24}$$

$$= 3 \times 6 \times 24$$

$$= 432 \text{ m}^2$$

$$\text{Area of Rhombus} = 432 \times 2 = 864 \text{ m}^2$$

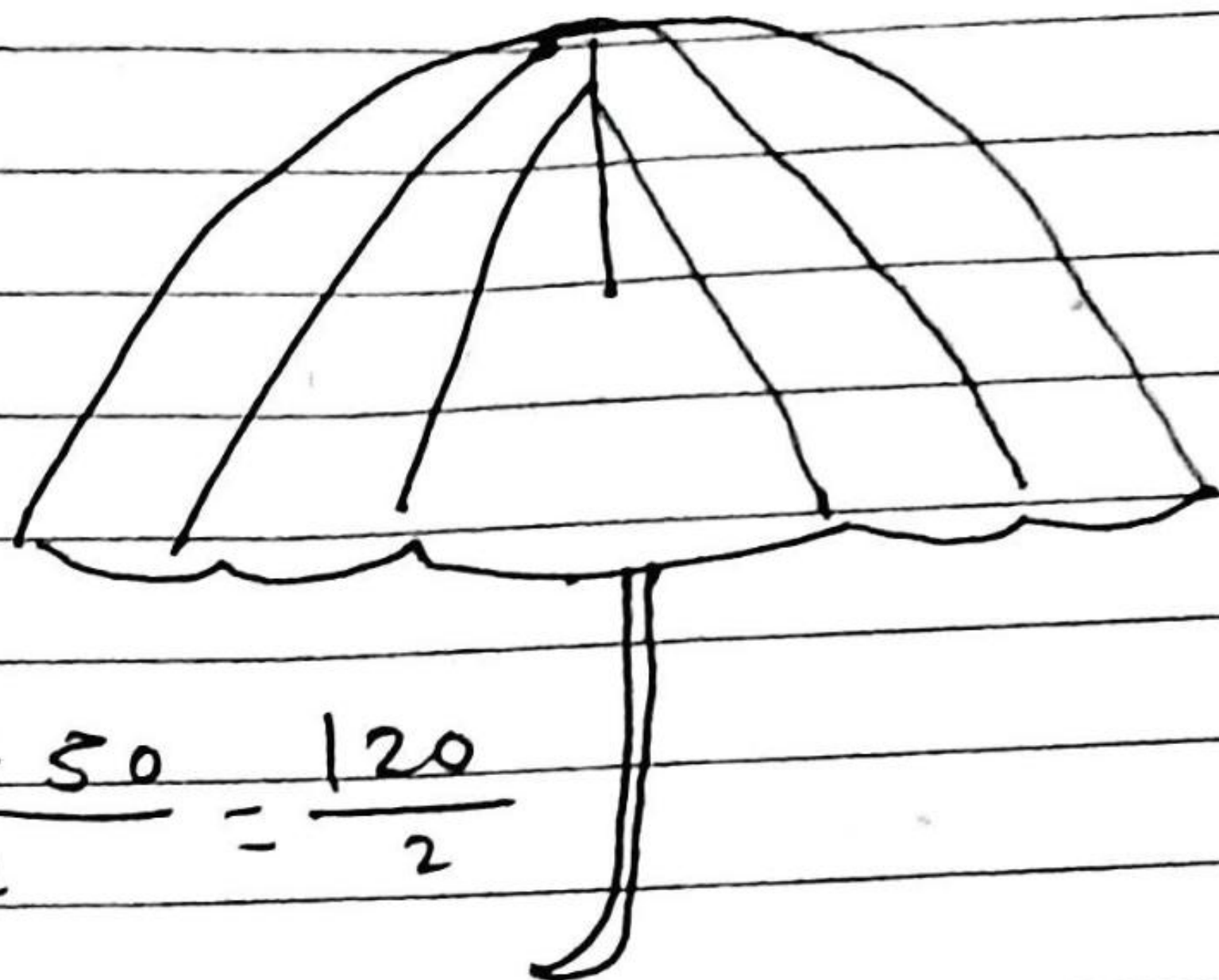
$$\begin{aligned} \text{Area of each cow} &= \frac{864}{18} \\ &= 48 \text{ m}^2 \end{aligned}$$

2. for Δ piece -

$$a = 20$$

$$b = 50$$

$$c = 50$$



$$s = \frac{a+b+c}{2} = \frac{20+50+50}{2} = \frac{120}{2}$$

$$= 60 \text{ cm}$$

$$s-a = 60-20 = 40$$

$$s-b = 60-50 = 10$$

$$s-c = 60-50 = 10$$

$$\text{Area} = \sqrt{s(s-a)(s-b)(s-c)}$$

$$= \sqrt{600 \times 40 \times 10 \times 10}$$

$$= \sqrt{40 \times 3 \times 40 \times 10 \times 10}$$

$$= 40 \times 10 \sqrt{3}$$

$$= 400\sqrt{3}$$

$$= 200\sqrt{6}$$

$$\begin{aligned} \text{Area of each colour} &= 5 \times 200\sqrt{6} \\ &= 1000\sqrt{6} \text{ cm}^2 \end{aligned}$$