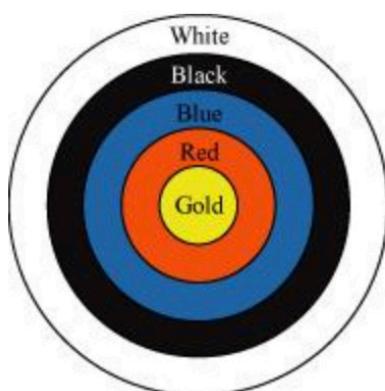


**Q3:**

Given figure depicts an archery target marked with its five scoring areas from the centre outwards as Gold, Red, Blue, Black and White. The diameter of the region representing Gold score is 21 cm and each of the other bands is 10.5 cm wide. Find the area of each of the five scoring regions.

$$\left[ \text{Use } \pi = \frac{22}{7} \right]$$



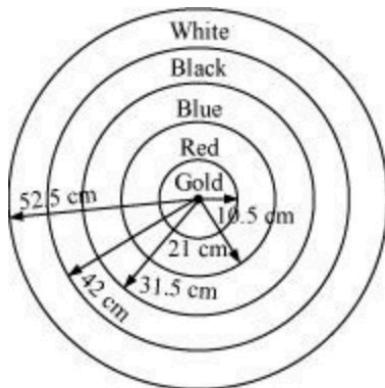
$$r = 10.5 \text{ cm}$$

$$\text{diameter} = 2r$$

$$2 \times 10.5$$

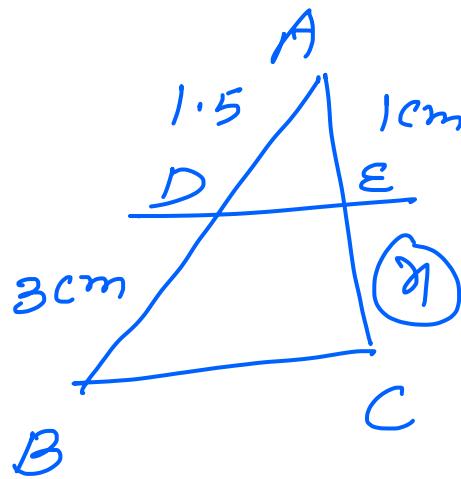
$$= 21 \text{ cm}$$

**Solution:**



$$A = \pi r^2$$

Red  $\Rightarrow$



Que!

$$\frac{AD}{BD} = \frac{AE}{EC}$$

$$\frac{1.5}{3} \neq \frac{1}{x}$$

$$1 \cdot 5x = 3$$

$$x = \frac{30}{15}$$

$x = 2\text{cm}$

$$\frac{AD}{BD} = \frac{AE}{EC} \text{ Then}$$

(B.P.T.)

$\underline{\underline{DE}} \parallel \underline{\underline{BC}}$

Que 2.

$$\frac{3.9}{30} = \frac{3.6}{214}$$

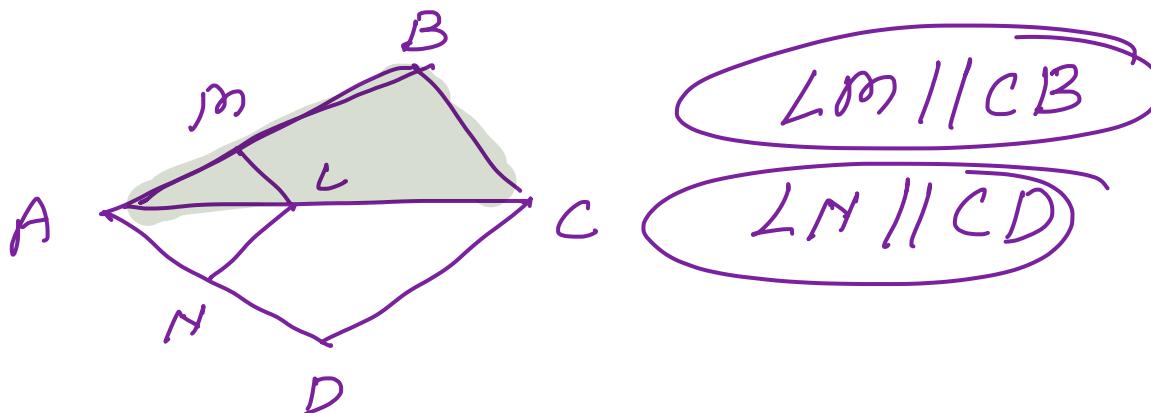
$$= 1.3 \neq 1.5$$

$$\frac{PE}{EQ} \neq \frac{PF}{FR}$$

Therefore  $EF$  is not  $\parallel$  to  $QR$ .

(ii) ?

Que 3.



In  $\triangle ABC$

$$\frac{AM}{MB} = \frac{AL}{LC} \quad \text{--- (i)}$$

In  $\triangle ADC$

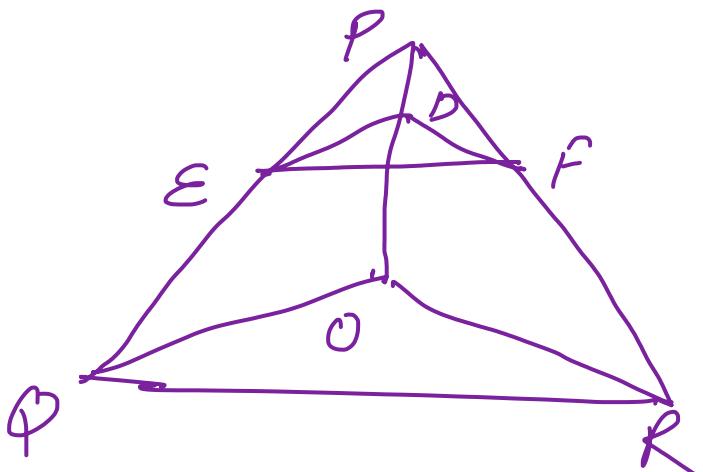
$$\frac{AL}{LC} = \frac{AN}{ND} \quad \text{--- (ii)}$$

From (i) and (ii) we obtain

$$\frac{Am}{MB} = \frac{AN}{ND}$$

Ans

Ques.



DE || OG

DF || OR

Show that EF || QR

In  $\triangle POQ$ . DE || OG

$$\frac{PE}{EQ} = \frac{PD}{DO} \quad (\text{B.P.T.}) \rightarrow \textcircled{1}$$

In  $\triangle POR$  DF || OR.

$$\frac{PF}{FR} = \frac{PD}{DO} \rightarrow \textcircled{11}$$

$$\frac{PE}{EQ} = \frac{PF}{FR}$$

EF || QR

