

Heron,s Formular - Ex12.4

3. NCERT Solutions by Dev Anoop (Bathinda)

area of trapezium = 475 cm^2

$$\frac{1}{2} \times (b_1 + b_2) = 475$$

$$\frac{1}{2} (\alpha + \alpha + 4) \times 19 = 475$$

$$\frac{1}{2} (2\alpha + 4) \times 19 = 475$$

$$\Rightarrow \frac{2(\alpha + 2)}{2} = \frac{475}{19} \quad 25$$

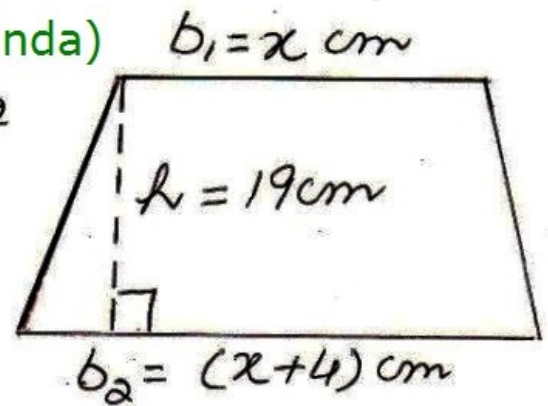
$$\Rightarrow \alpha = 25 - 2$$

$$\Rightarrow \alpha = 23$$

$$\therefore b_1 = \alpha = 23 \text{ cm}$$

$$b_2 = \alpha + 4 = 23 + 4 \\ = 27 \text{ cm}$$

\therefore Parallel sides are 23 cm, 27 cm



4. length of area where house can be constructed (l) = $40 - 3 - 3$
 $= 34 \text{ m}$

$$\text{breath (b)} = 15 - 2 - 2 \\ = 11 \text{ m}$$

$$\text{area} = lb \\ = 34 \times 11 \\ = 374 \text{ m}^2$$

