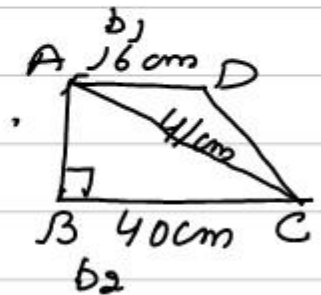


# class VIII, 18A, P4

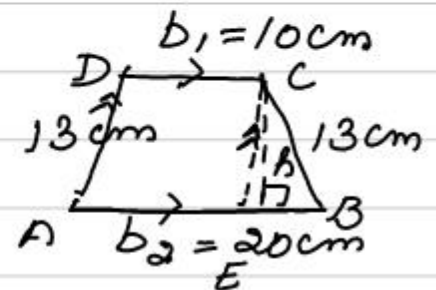
## Solutions by Dev Anoop

⑩ In rt  $\Delta ABC$   
 $AB^2 = AC^2 - BC^2$  (Pythagoras theorem)  
 $= 41^2 - 40^2$   
 $= (41-40)(41+40)$   
 $= 1 \times 81$   
 $AB = \sqrt{81}$   
 $= 9 \text{ cm}$



area of trapezium  $= \frac{1}{2} (b_1 + b_2) h$   
 $= \frac{1}{2} (16 + 40) \times 9$   
 $= \frac{1}{2} \times 56 \times 9$   
 $= 252 \text{ cm}^2$

⑪ Const - draw  $CE \parallel DA$   
 Sol  $\square AECD$  is a  $\parallel$  gm  
 $AE = DC = 10 \text{ cm}$   
 $CE = DA = 13 \text{ cm}$



$\Delta CEB$

$$s = \frac{a+b+c}{2} = \frac{13+13+10}{2} = 18 \text{ cm}$$

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

$$= \sqrt{18(18-13)(18-13)(18-10)}$$

$$\frac{1}{2} \times EB \times h = \sqrt{18 \times 5 \times 5 \times 8}$$

$$\frac{1}{2} \times 10 \times h = 5 \sqrt{3^2 \times 2 \times 2^2 \times 2}$$

$$5h = 5 \times 2 \times 2 \times 3$$

$$= 60 \text{ cm}^2$$

$$\text{ar}(\Delta) = 60 \text{ cm}^2$$

$$\frac{1}{2} \times 10 \times h = 60 \text{ cm}^2$$

$$h = 12 \text{ cm}$$

area of trap.

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

$$= \frac{1}{2} (10 + 20) \times 12$$

$$= 30 \times 6$$

$$= 180 \text{ cm}^2$$