



A
B
C
D

$$\text{Dato: } BC = 9 \text{ cm}$$

$$AD = 18 \text{ cm}$$

$$CD = 15 \text{ cm}$$

$$\text{Höjde: } S_{ABC} - ?$$

$$AR = BC = 9$$

$$KD = AD - AR = 18 - 9 = 9$$

CR Höjdena respektive
Höjdena respektive

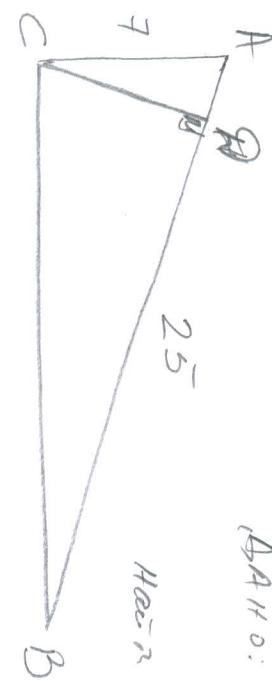
$$CR = \sqrt{15^2 - 9^2} = \sqrt{225 - 81} = 12$$

$$CR = 12$$

$$S_{CR} = \frac{1}{2} \cdot 12 \cdot 9 = 54 \text{ cm}^2$$

$$S_{ABCD} = 9 \cdot 12 = 108 \text{ cm}^2$$

$$S_{ABCD} = 54 + 108 = 162 \text{ cm}^2$$



$$AD = x \Rightarrow AB = 25 - x$$

Cosetensatsen gäller

$$\frac{AD}{AC} = \frac{AC}{AB} \Rightarrow$$

$$\frac{AD}{7} = \frac{7}{25} \quad AD = \frac{49}{25} = 1.96$$

$$AB = 25 - 1.96 = 23.04$$

Tänk på pythagoras satsen

$$\frac{AD}{CD} = \frac{CD}{AB} \Rightarrow$$

$$CD = \sqrt{AD \cdot AB} = \sqrt{1.96 \cdot 23.04} =$$

$$= 1.4 \cdot 4.8 = \underline{\underline{6.72 \text{ cm}}}$$

$$\text{Data: } AB = 25 \text{ cm}$$

$$AC = 7 \text{ cm}$$

$$Höjd: CD - ?$$