



$$KB=BL=CM=LC=9$$

$$r=12 \Rightarrow BH=LN=24$$

$$2 \cdot AB = BC + AD$$

$$AB=x; \Rightarrow 2x-9 \cdot 2 + AD \Rightarrow AD=2x-18$$

$$AN=AD/2 \Rightarrow AN=x-9$$

$$AH=AN-HN=AN-BL=x-9-9=x-18$$

$$\Delta ABH: AB^2 = AH^2 + BH^2$$

$$x^2 = (x-18)^2 + 24^2$$

$$x^2 - 26x + 324 + 576 = x^2$$

$$x=25$$

$$S_{abcd} = (AD+BC) \cdot LN / 2 = 2 \cdot AB \cdot LN / 2 = AB \cdot LN = 25 \cdot 24 = 600$$