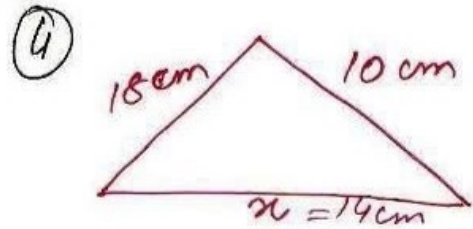


$$\begin{aligned}
 s &= \frac{a+b+c}{2} \\
 &= \frac{6+11+15}{2} \\
 &= \frac{32}{2} \\
 &= 16 \text{ m}
 \end{aligned}$$

$$\begin{aligned}
 \text{area} &= \sqrt{s(s-a)(s-b)(s-c)} \\
 &= \sqrt{16(16-6)(16-11)(16-15)} \\
 &= \sqrt{16 \times 10 \times 5 \times 1} \\
 &= \sqrt{4 \times 4 \times 2 \times 5 \times 5} \\
 &= 4 \times 5 \sqrt{2} \\
 &= 20\sqrt{2} \text{ m}^2
 \end{aligned}$$

$$\begin{aligned}
 \therefore \text{area to be painted} &= 20\sqrt{2} \\
 &= 20 \times 1.41 \\
 &= 28.2 \text{ m}^2
 \end{aligned}$$



$$\begin{aligned}
 \text{Perimeter} &= 42 \text{ cm} \\
 18 + 10 + x &= 42 \\
 \Rightarrow x &= 42 - 28 \\
 &= 14 \\
 \therefore \text{Third Side} &= 14 \text{ cm} \\
 s &= \frac{P}{2} \\
 &= \frac{42}{2} \\
 &= 21 \text{ cm}
 \end{aligned}$$

$$\begin{aligned}
 \text{area of } \Delta &= \sqrt{s(s-a)(s-b)(s-c)} \\
 &= \sqrt{21(21-10)(21-14)(21-18)} \\
 &= \sqrt{21 \times 11 \times 7 \times 3} \\
 &= \sqrt{3 \times 7 \times 11 \times 7 \times 3} \\
 &= 3 \times 7 \sqrt{11} \\
 &= 21\sqrt{11} \text{ cm}^2
 \end{aligned}$$