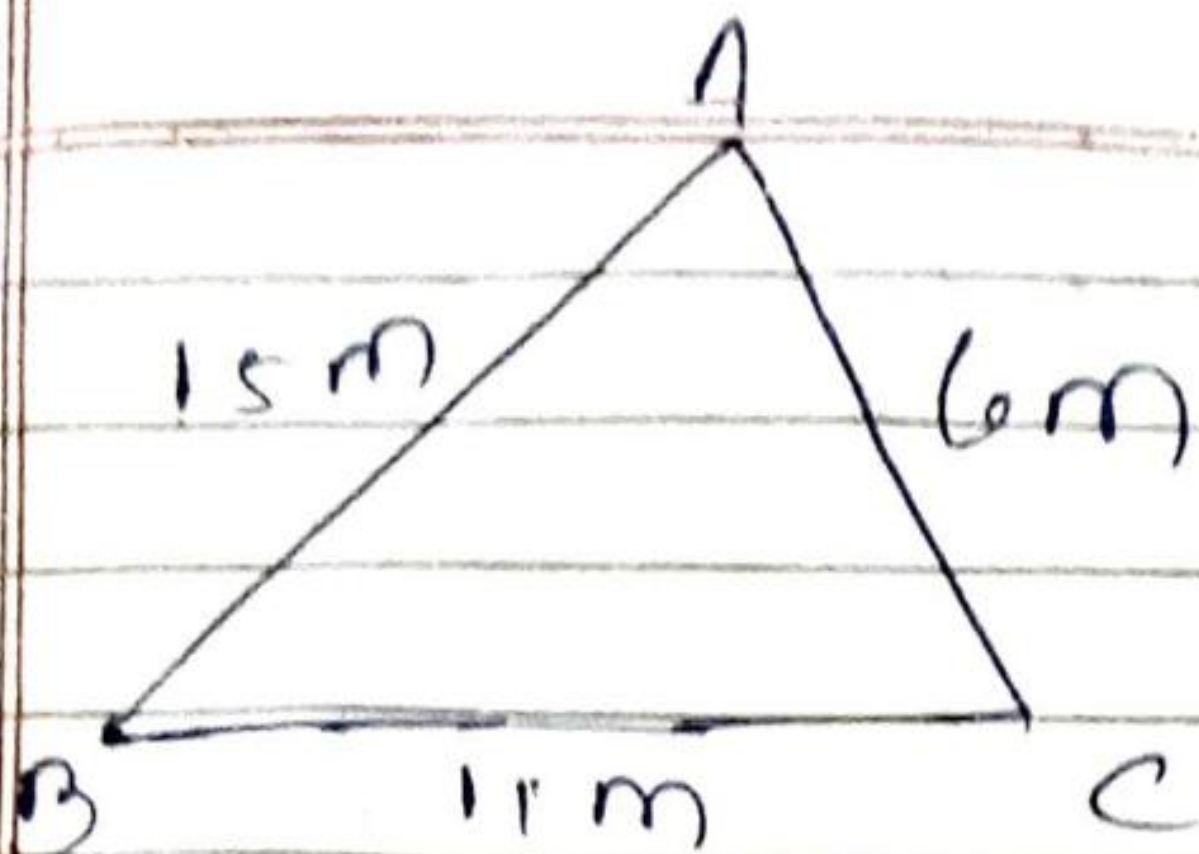


③



Ans) Semi-perimeter = $\frac{15m + 11m + 6m}{2}$
 $= \frac{32}{2} = 16m$

$\Rightarrow \sqrt{16(16-15)(16-11)(16-6)}$

$\Rightarrow \sqrt{16(1)(5)(10)}$

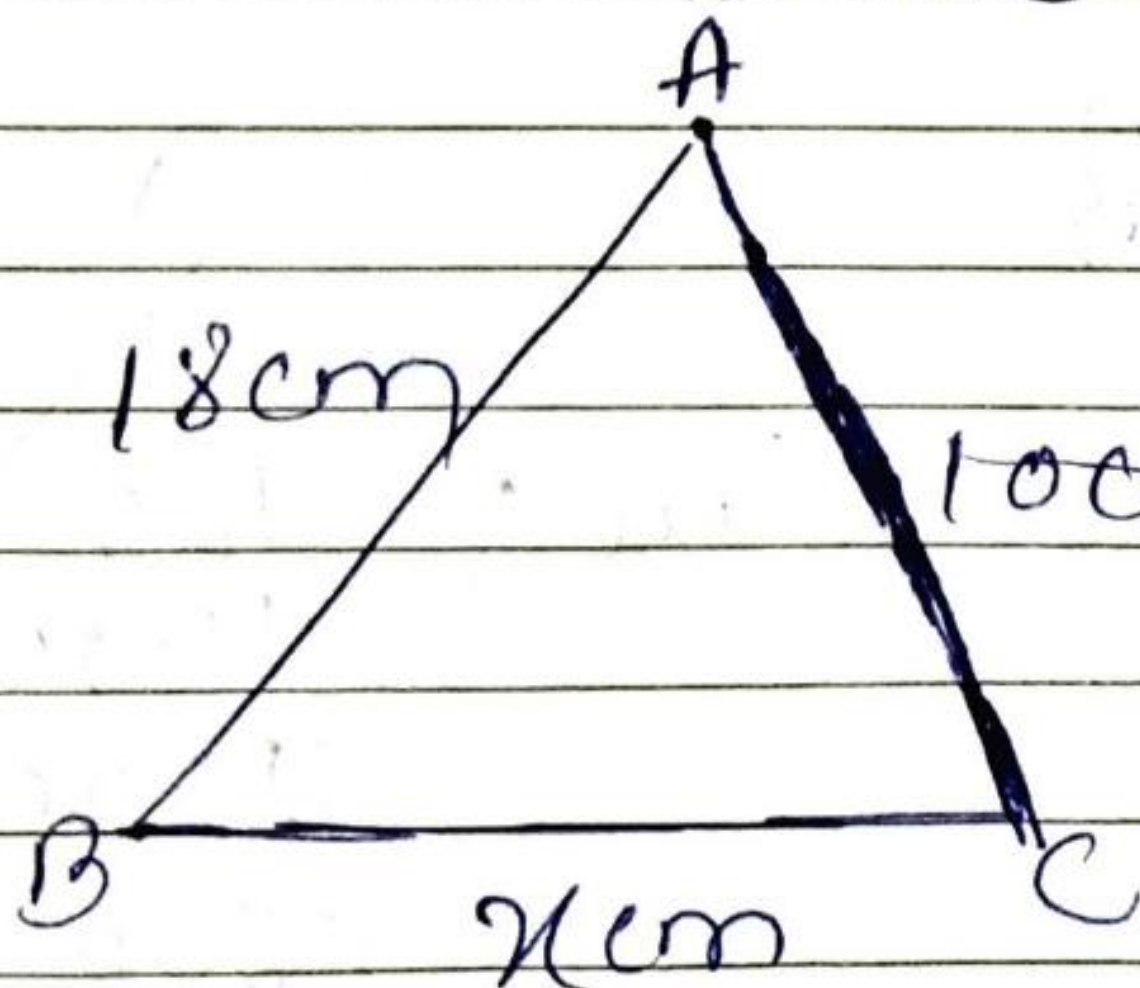
$\Rightarrow \sqrt{2 \times 2 \times 2 \times 2 \times 5 \times 2 \times 5}$

$\Rightarrow \sqrt{2 \times 2 \times 5 \times 2}$

$\Rightarrow \sqrt{20 \times 2}$

$\Rightarrow 2\sqrt{20} \text{ m}^2$ is the area painted in colour.

④



$P = 42 \text{ cm}$

$P \Rightarrow 18 \text{ cm} + 10 \text{ cm} + x = 42 \text{ cm}$

$\Rightarrow 28 \text{ cm} + x = 42 \text{ cm}$

$\Rightarrow x = 42 - 28$

$\Rightarrow x = 14$

$\Rightarrow \frac{18 \text{ cm} + 10 \text{ cm} + 14 \text{ cm}}{2}$

$\Rightarrow \frac{42}{2} = 21 \text{ cm}$

$$\Rightarrow \sqrt{21(21-18)(21-14)(21-10)}$$

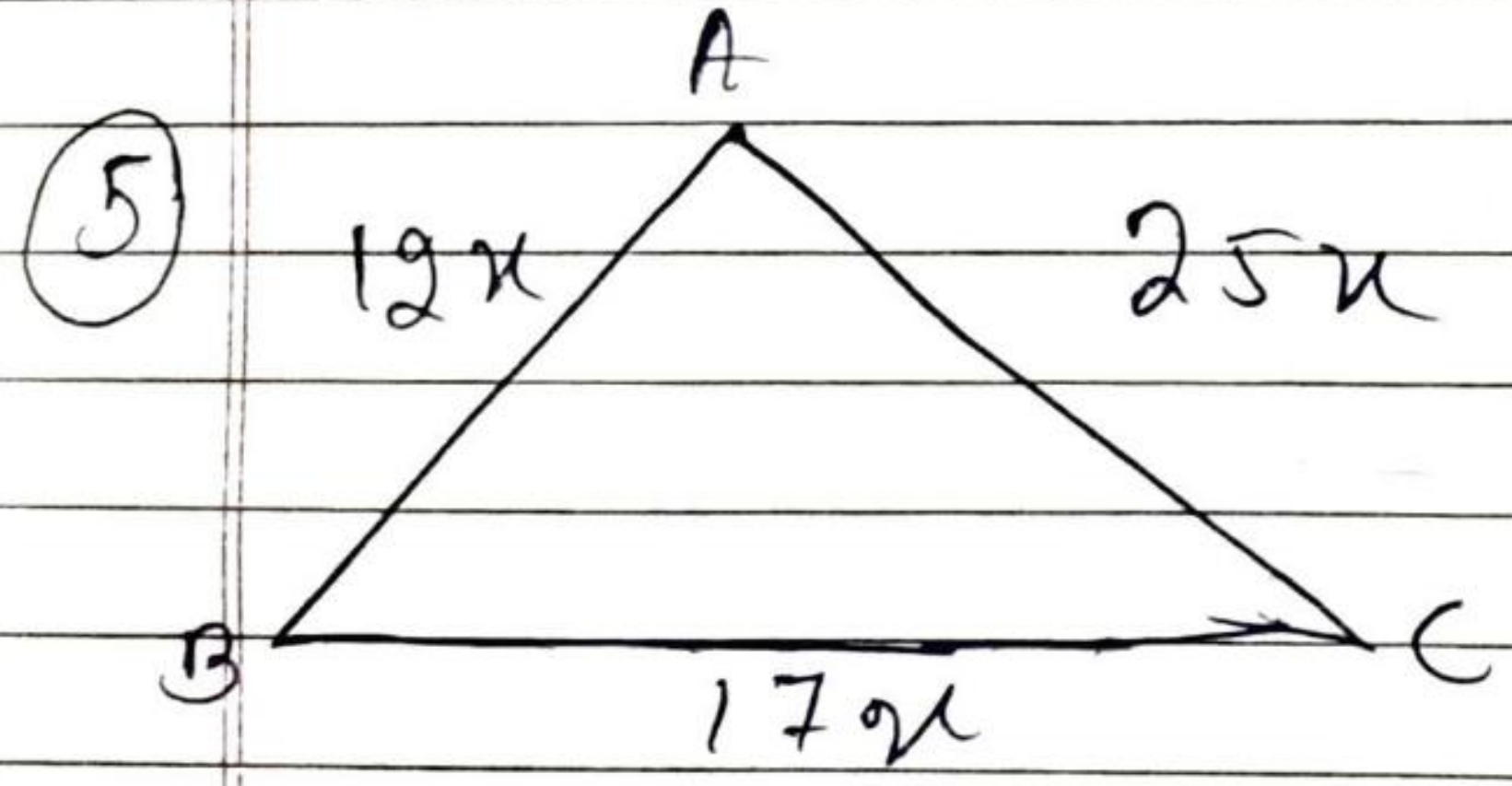
$$\Rightarrow \sqrt{21(3)(7)(11)}$$

$$\Rightarrow \sqrt{3 \times 7 \times 3 \times 7 \times 11}$$

$$\Rightarrow \sqrt{3 \times 7 \times 11}$$

$$\Rightarrow \sqrt{21 \times 11}$$

$\Rightarrow 21\sqrt{11} \text{ m}^2$ is the area of triangle



$$P = 540 \text{ cm}$$

$$P \Rightarrow 12x + 17x + 25x = 540 \text{ cm}$$

$$\Rightarrow 54x = 540 \text{ cm}$$

$$\Rightarrow x = \frac{540}{54} = 10 \text{ cm}$$

Now putting the value :-

$$12x = 12 \times 10 = 120 \text{ cm}$$

$$17x = 17 \times 10 = 170 \text{ cm}$$

$$25x = 25 \times 10 = 250 \text{ cm}$$

$$S = \frac{250 + 170 + 120}{2}$$

$$S = \frac{540}{2} = 270$$

$$\Rightarrow \sqrt{270(270-250)(270-170)(270-120)}$$

$$\Rightarrow \sqrt{270(20)(100)(150)}$$

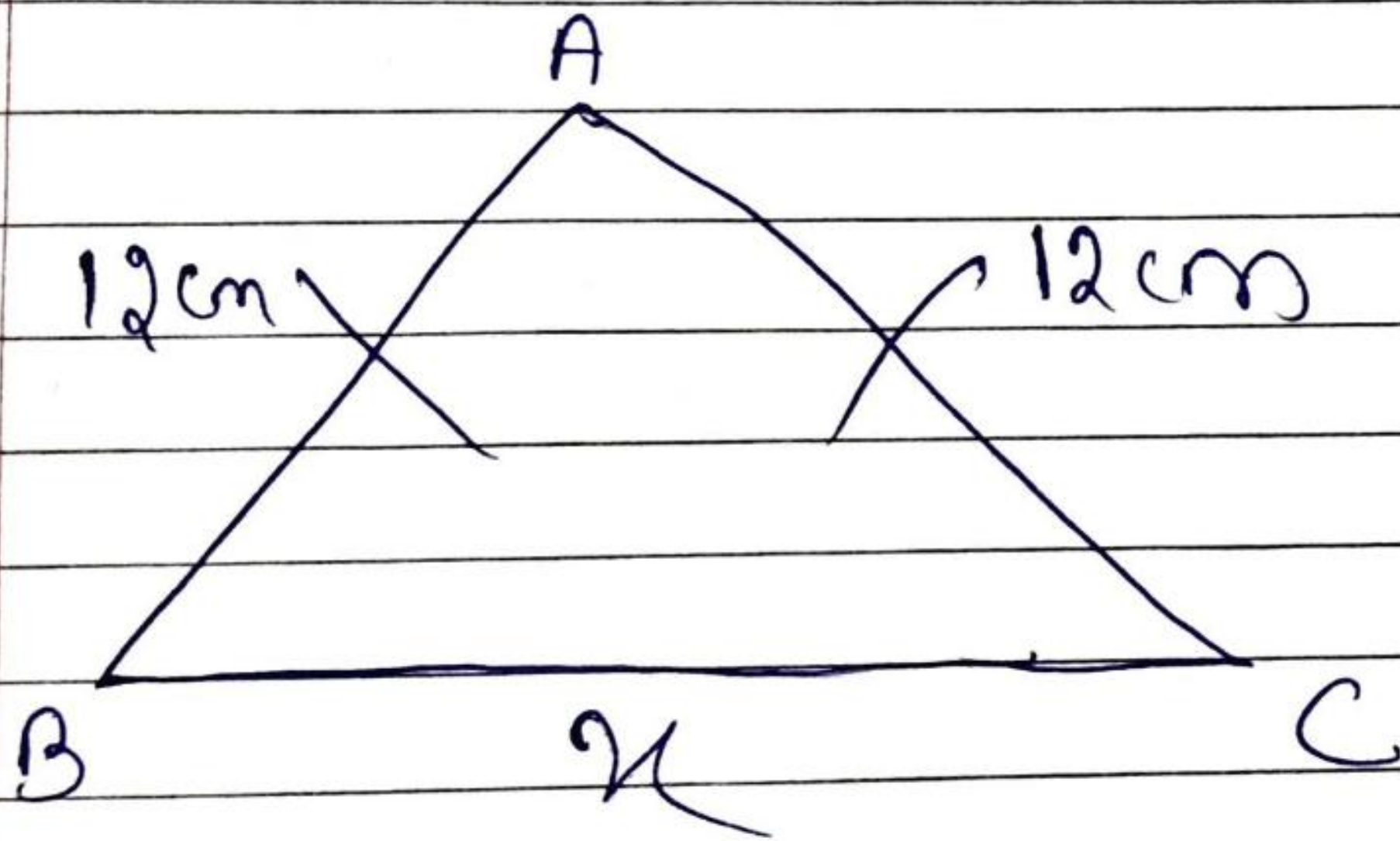
$$\Rightarrow \sqrt{3 \times 3 \times 3 \times 2 \times 5 \times 2 \times 2 \times 5 \times 2 \times 2 \times 5 \times 5 \times 3 \times 5 \times 5 \times 2}$$

$$\Rightarrow \sqrt{3 \times 3 \times 2 \times 2 \times 2 \times 5 \times 5 \times 5}$$

$$\Rightarrow \sqrt{45000}$$

$$\Rightarrow 45000 \text{ m}^2$$

(6)



$$P = 30 \text{ cm}$$

$$P \Rightarrow 12 + 12 + x = 30 \text{ cm}$$

$$\Rightarrow 24 \text{ cm} + x = 30 \text{ cm}$$

$$\Rightarrow x = 30 \text{ cm} - 24 \text{ cm}$$

$$\Rightarrow x = 6 \text{ cm}$$

$$S = \frac{12 + 12 + 6}{2} \Rightarrow \frac{30}{2} = 15 \text{ cm}$$

$$\Rightarrow \sqrt{15(15-12)(15-12)(15-6)}$$

$$\Rightarrow \sqrt{15(3)(3)(9)}$$

$$\Rightarrow \sqrt{3 \times 5 \times 3 \times 3 \times 3 \times 3}$$

$$\Rightarrow \sqrt{3 \times 3 \times 15}$$

\Rightarrow ~~9~~ $9\sqrt{15} \text{ cm}^2$ is the area of triangle.