4) The sides of the triangle are 18 cm, 10 cm and third side is unknown as x.

Perimeter of the triangle = 42 cm

So,

The length of the 3rd side = $18 + 10 + x = 42$ cm

$\Rightarrow x = 42 - 28$ cm

$\Rightarrow x = 14$ cm

Hence,

The Semi Perimeter of the triangle = $\frac{42}{2}$ cm

$= 21$ cm

Area of the triangle = $\sqrt{s(s-a)(s-b)(s-c)}$ cm^2

$= \sqrt{21(21-18)(21-10)(21-14)}$ cm^2

$= \sqrt{21 \times 3 \times 11 \times 7}$ cm^2

$= \sqrt{4851}$ cm^2

$= 21\sqrt{11}$ cm^2

5) The sides of the triangle are in the ratio of 12:17:25 and its perimeter is 540 cm. Let the sides be $12x$, $17x$ and $25x$.

The length of the sides $= 12x + 17x + 25x = 540$ cm

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

Hence, $12x = 12 \times 10 = 120$ cm, $17x = 17 \times 10 = 170$ cm & $25x = 25 \times 10 = 250$ cm

Semi Perimeter of the triangle $= \frac{540}{2}$ cm

$= 270$ cm

Area of the triangle $= \sqrt{s(s-a)(s-b)(s-c)}$ cm^2

$= \sqrt{270(270-250)(270-170)(270-120)}$ cm^2

$= \sqrt{270 \times 20 \times 100 \times 150}$ cm^2

$= \sqrt{81.000000}$ cm^2

$= 9000$ cm^2