3) Let the sides of the wall be :-

$a = 15m$

$b = 11m$

$c = 6m$

$s = \frac{a+b+c}{2}$

$= \frac{15+11+6}{2} = \frac{32}{2} m$

$m = 16$

Area of the triangular surface of the wall

$= \sqrt{s(s-a)(s-b)(s-c)}$

$\sqrt{16(16-15)(16-11)(16-6)} m^2$

$= \sqrt{16 \times 1 \times 5 \times 10} m^2$

$= \sqrt{2 \times 400} m^2$

$= 20\sqrt{2} m^2$.

4) Let the sides of the triangle be

$a = 18$

$b = 10cm$

$c = x cm$

Perimeter $= 42$

so $= 18 + 10 + x = 42$

$x = 42 - (18+10)$

$x = 42 - 28$

$x = 14cm$.

Semi perimeter $= \frac{42}{2} = 21cm$.

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

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

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

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

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

5) Let the sides of the triangles be

$a = 12x$ cm

$b = 17x$ cm

$c = 25x$ cm

Perimeter $= 540$ cm

$12x + 17x + 25x = 540$

$54x = 54$

$x = 10$

$a = (12 \times 10\ cm) = 120$ cm

$b = (17 \times 10\ cm) = 170$ cm

$c = (25 \times 10\ cm) = 250$ cm.

$s = \frac{540}{2}\ cm = 270$ cm.

Area $= \sqrt{s(s-a)(s-b)(s-c)}$

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

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

$\sqrt{10^2 \times 10^2 \times 3^2 \times 3^2 \times 5^2 \times 2^2}\ cm^2$

$= 10 \times 10 \times 3 \times 3 \times 5 \times 2\ cm^2$

$= 9000\ cm^2$

6) Let the sides of an isosceles triangle be
$a = 12cm$
$b = 12cm$
$c = x\,cm$
Perimeter $= 30$
$12 + 12 + x = 30$
$x = (30 - 24) = 6$
$s = \frac{30}{2} cm = 15$
$= \sqrt{15(15-12)(15-12)(15-6)}\,cm^2$
$= \sqrt{15 \times 3 \times 3 \times 9}\,cm^2$
$= \sqrt{5 \times 3 \times 3 \times 3 \times 3 \times 3}\,cm^2$
$= \sqrt{3^2 \times 3^2 \times 3 \times 5}\,cm^2$
$= 3 \times 3 \times \sqrt{3 \times 5}\,cm^2$
$= 9\sqrt{15}\,cm^2$