We have a triangle with base 36 cms and height 12 cms. So

$$S_{triangle} = 12 * \frac{36}{2} = 216 \ (cms^2)$$

Let 1-st dimension of a rectangle = x, then second dimension = $\frac{36}{2} - x$

Then

$$S = x \left(\frac{36 + 12}{2} - x \right) = x(24 - x)$$

So find maximum area:

$$S' = 0$$

Then

$$x = 6$$

Other dimension:

$$24 - x = 24 - 6 = 18$$

Answer: 18 by 6.