Heronova formula u dvije slike

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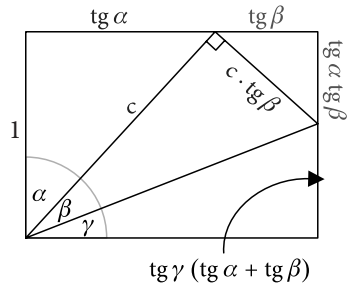
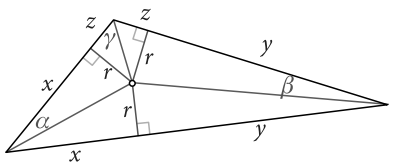


$$\alpha + \beta + \gamma = \frac{\pi}{2} \quad \Rightarrow \quad \operatorname{tg}\alpha \operatorname{tg}\beta + \operatorname{tg}\beta \operatorname{tg}\gamma + \operatorname{tg}\gamma \operatorname{tg}\alpha = 1$$



$$x + y + z = s$$

$$x = s - a, \quad y = s - b, \quad z = s - c$$

$$P = \frac{r(x+y)}{2} + \frac{r(y+z)}{2} + \frac{r(z+x)}{2} = rs$$

$$\frac{r}{x}\cdot\frac{r}{y} + \frac{r}{y}\cdot\frac{r}{z} + \frac{r}{z}\cdot\frac{r}{x} = 1$$

$$r^2(x + y + z) = xyz$$

$$r^2 s^2 = xyzs$$

$$P = (sxyz)^{1/2}$$

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