Zadatak 9. Kolika je duljina visine spuštene iz vrha A na stranicu $\overline{BC}$ trokuta ABC ako je $A(-2,2)$, $B(4,-1)$, $C(2,5)$?

Rješenje.

$$\begin{aligned} &A(-2,2)\\ &B(4,-1)\\ &C(2,5)\\ &\hline\\ &v_a = ? \end{aligned}$$

$$\begin{aligned} a = BC \quad \ldots \; & y+1 = \frac{5+1}{2-4}(x-4)\\ & y+1 = -3(x-4)\\ & y+1 = -3x+12\\ & 3x+y-11 = 0 \end{aligned}$$

$$v_a = d(A,a) = \frac{|3\cdot(-2)+1\cdot 2-11|}{\sqrt{9+1}} = \frac{15}{\sqrt{10}}\cdot\frac{\sqrt{10}}{\sqrt{10}} = \frac{15\sqrt{10}}{10} = \frac{3\sqrt{10}}{2}$$