Geometry 1e – Practice

2nd class – 23.09.2025.

1. In ABC triangle $|AB| = 10cm, |BC| = 7cm, |CA| = 5cm$. Determine $\left|\overrightarrow{AC} \times \overrightarrow{CB}\right|$.
2. Determine the area of the parallelogramm, determined by $\underline{a} + 2\underline{b}$ and $\underline{a} - 3\underline{b}$, if $\left|\underline{a}\right| = 5$, $\left|\underline{b}\right| = 3$ and $\alpha = \frac{\pi}{6}$.
3. Determine the angle, circumference and area of the triangle, determined by A(3,4), B(-1,2) C(8,-3).
4. Prove that ABC is right angled triangle, where A(1,1), B(2,3) and C(5,-1).
5. Decompose $\underline{a}(1,4,8)$ into parallel and orthogonal components respected to $\underline{b}(1,-2,3)$.
6. Determine the vertices of trinagle ABC if their midpoints of the sides are D(-2,3), E(4,6), F(5,2).
7. Determine the area of ABD triangle, where D is the missing vertex of the parallelogram, determined by A(1,7), B(-3,5), C(5,-9).