

6. (a, b)

$(x, x): x \in \{1, \dots, 6\}$

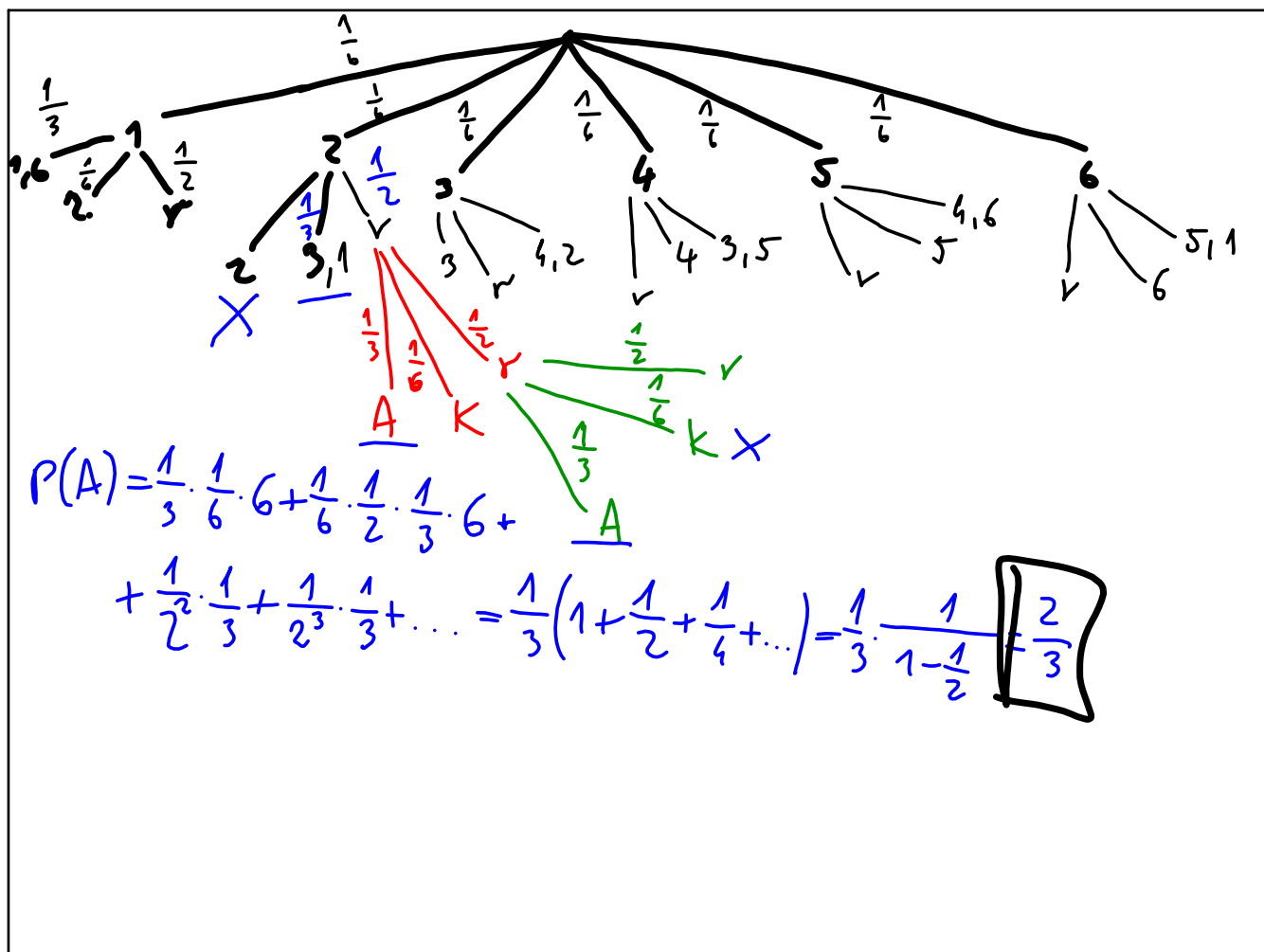
$\left. \begin{array}{l} 1, 2 \\ 2, 3 \\ 3, 4 \\ 4, 5 \\ 5, 6 \\ 6, 1 \end{array} \right\} \times \mathbb{Z}$

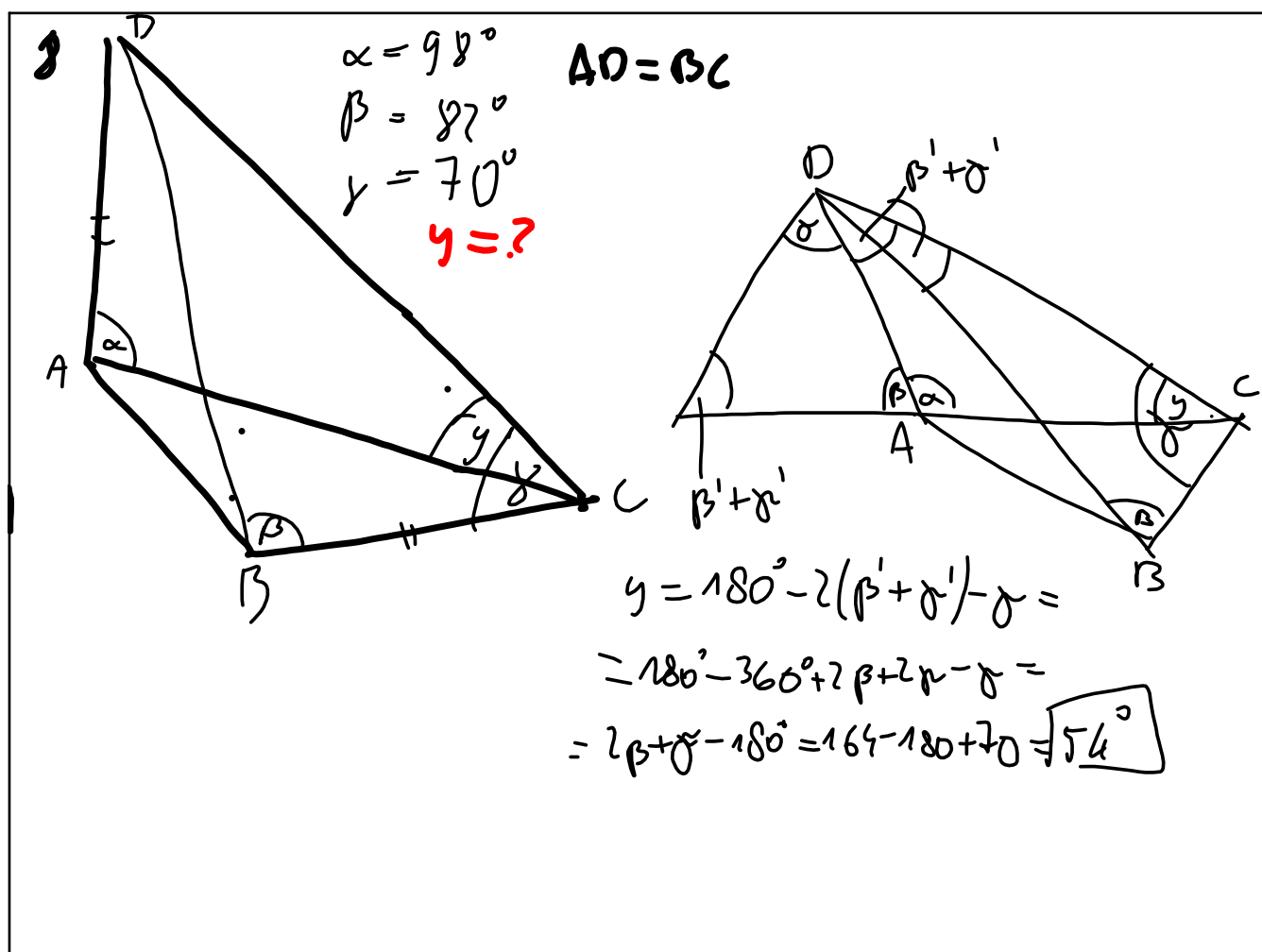
$b - a$

$$b - a < 0$$

$$b - a \equiv 1 \pmod{6}$$

$$b - a \equiv 5 \pmod{6}$$





$180^\circ - 2\alpha \quad \tan \alpha = 5\sqrt{3}$
 $A \quad 120^\circ \quad B \quad 2\alpha - 120^\circ$
 $\frac{BM}{\sin(120^\circ - \alpha)} = \frac{AB}{\sin \alpha}$
 $\frac{BM}{AB} = \frac{\sin(120^\circ - \alpha)}{\sin \alpha} = \frac{\sin 120^\circ \cos \alpha - \sin \alpha \cos 120^\circ}{\sin \alpha} =$
 $\frac{\sin 120^\circ}{\tan \alpha} - \cos 120^\circ = \frac{\cos 30^\circ}{5\sqrt{3}} + \sin 30^\circ =$
 $= \frac{1}{16} + \frac{1}{2} = 0,6\frac{\sqrt{3}}{5}$
 $\sin \alpha = \sqrt{\frac{1}{\tan^2 \alpha + 1}}$