

Zadania #1

z.1

$$\begin{aligned} E[(X - E[X])(Y - E[Y])] &= E[XY - XE[Y] - E[X]Y + E[X]E[Y]] = \\ &= E[XY] - E[X]E[Y] - E[X]E[Y] + E[X]E[Y] \\ &= E[XY] - E[X]E[Y] \end{aligned}$$

$$\Leftrightarrow E[(X - E[X])(Y - E[Y])] = E[XY] - E[X]E[Y]$$

