ZAD 6 $a_1 \quad a_2 \quad a_3$

$4 ; x-2 ; 16$ — CIĄG GEOMETRYCZNY

W CIĄGU GEOMETRYCZNYM ILOCZYN WYRAZÓW SĄSIEDNICH JEST STAŁY CZYLI

$$\frac{a_2}{a_1} = \frac{a_3}{a_2} \qquad \frac{x-2}{4} = \frac{16}{x-2}$$

$$(x-2)^2 = 4 \cdot 16$$

$$x^2 - 4x + 4 - 64 = 0$$

$$x^2 - 4x - 60 = 0$$

$$\Delta = 16 + 4 \cdot 60$$

$$\Delta = 16 + 240$$

$$\Delta = 256$$

$$\sqrt{\Delta} = 16$$

$$x_1 = \frac{4-16}{2} = \frac{-12}{2} = -6$$

$$x_2 = \frac{4+16}{2} = \frac{20}{2} = 10$$

1° $x_1 = -6$ $\quad 4 ; -8 ; 16$

2° $x_2 = 10$ $\quad 4 ; 8 ; 16$

ZAD 7

$$\frac{\sin 15^\circ}{\cos 75^\circ} \cdot \operatorname{tg} 75^\circ = \qquad \operatorname{tg} 75^\circ = \frac{\cos 75^\circ}{\sin 75^\circ}$$

$$= \frac{\sin 15^\circ}{\cos 75^\circ} \cdot \frac{\cos 75^\circ}{\sin 75^\circ} = \frac{\sin 15^\circ}{\cos 15^\circ} = \operatorname{tg} 15^\circ$$

$\sin 75^\circ = \cos(90^\circ - 75^\circ) = \cos 15^\circ$