KURS
MATURA ROZSZERZONA
część 2

LEKCJA 8
Trygonometria

Odpowiedzi do zadań na rozgrzewkę

Zad. 1

a) $\sin\alpha = \frac{5}{13},\ \cos\alpha = \frac{12}{13},\ \mathrm{tg}\alpha = \frac{5}{12}$
$\sin\beta = \frac{12}{13},\ \cos\beta = \frac{5}{13},\ \mathrm{tg}\beta = \frac{12}{5}$

b) $\sin\alpha = \frac{3}{5},\ \cos\alpha = \frac{4}{5},\ \mathrm{tg}\alpha = \frac{3}{4}$
$\sin\beta = \frac{4}{5},\ \cos\beta = \frac{3}{5},\ \mathrm{tg}\beta = \frac{4}{3}$

Zad. 2

a) $\cos\alpha = \frac{24}{25},\ \mathrm{tg}\alpha = \frac{7}{24}$

b) $\sin\alpha = \frac{12}{13},\ \mathrm{tg}\alpha = -\frac{12}{5}$

c) $\sin\alpha = -\frac{8}{17},\ \mathrm{tg}\alpha = -\frac{8}{15}$

d) $\sin\alpha = -\frac{4}{5},\ \cos\alpha = -\frac{3}{5}$

Zad. 3

a) $\frac{\pi}{2}$

b) $\frac{2\pi}{3}$

c) $\frac{3\pi}{4}$

d) $\frac{5\pi}{3}$

Zad. 4

a) $75°$

b) $150°$

c) $210°$

d) $225°$

Zad. 5

a) 1
b) $3\frac{1}{4}$
c) $\frac{3\sqrt{2}-2\sqrt{3}-3}{6}$
d) 1

Zad. 6

a) tak
b) nie
c) nie
d) tak

Zad. 7

a) $\sin\alpha > 0,\ \cos\alpha < 0,\ \mathrm{tg}\alpha < 0$
b) $\sin\alpha < 0,\ \cos\alpha > 0,\ \mathrm{tg}\alpha < 0$
c) $\sin\alpha > 0,\ \cos\alpha > 0,\ \mathrm{tg}\alpha > 0$
d) $\sin\alpha < 0,\ \cos\alpha < 0,\ \mathrm{tg}\alpha > 0$

Zad. 8

a) $\alpha \in (270°, 360°)$
b) $\alpha \in (0°, 90°)$
c) $\alpha \in (180°, 270°)$
d) $\alpha \in (90°, 180°)$

Zad. 9

a) $\sin\alpha = \frac{4}{5},\ \cos\alpha = \frac{3}{5},\ \mathrm{tg}\alpha = \frac{4}{3}$

b) $\sin\alpha = \frac{5}{13},\ \cos\alpha = -\frac{12}{13},\ \mathrm{tg}\alpha = -\frac{5}{12}$

c) $\sin\alpha = -\frac{3}{5},\ \cos\alpha = -\frac{4}{5},\ \mathrm{tg}\alpha = \frac{3}{4}$

d) $\sin\alpha = -\frac{15}{17},\ \cos\alpha = \frac{8}{17},\ \mathrm{tg}\alpha = -\frac{15}{8}$

KONIEC