



KURS TRYGONOMETRIA

LEKCJA 1
dla poziomu
PODSTAWOWEGO + ROZSZERZONEGO

Funkcje trygonometryczne
w trójkącie prostokątnym

Odpowiedzi do zadania domowego

Część 1: TEST

- | | |
|------|-------|
| 1) a | 6) d |
| 2) d | 7) a |
| 3) c | 8) c |
| 4) b | 9) c |
| 5) b | 10) d |

ODPOWIEDZI DO ZADAŃ

Zad. 1

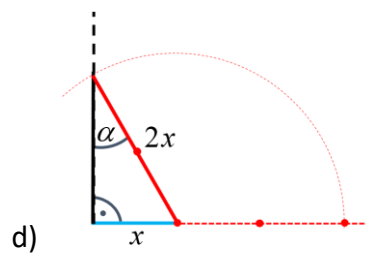
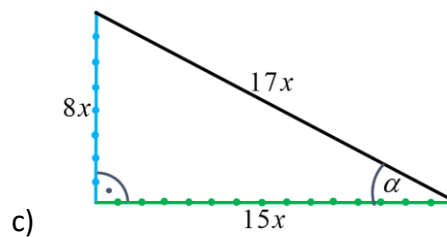
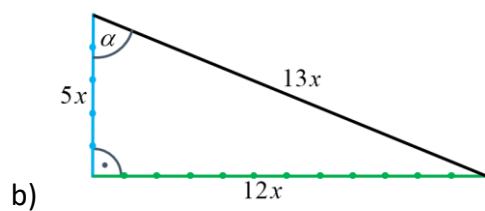
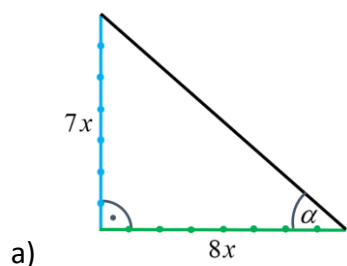
- a) $\sin \alpha = \frac{3}{5}, \cos \alpha = \frac{4}{5}, \operatorname{tg} \alpha = \frac{3}{4}, \operatorname{ctg} \alpha = \frac{4}{3}$
- b) $\sin \alpha = \frac{15}{17}, \cos \alpha = \frac{8}{17}, \operatorname{tg} \alpha = \frac{15}{8}, \operatorname{ctg} \alpha = \frac{8}{15}$
- c) $\sin \alpha = \frac{12}{13}, \cos \alpha = \frac{5}{13}, \operatorname{tg} \alpha = \frac{12}{5}, \operatorname{ctg} \alpha = \frac{5}{12}$
- d) $\sin \alpha = \frac{3}{\sqrt{34}}, \cos \alpha = \frac{5}{\sqrt{34}}, \operatorname{tg} \alpha = \frac{3}{5}, \operatorname{ctg} \alpha = \frac{5}{3}$
- e) $\sin \alpha = \frac{y}{z}, \cos \alpha = \frac{x}{z}, \operatorname{tg} \alpha = \frac{y}{x}, \operatorname{ctg} \alpha = \frac{x}{y}$
- f) $\sin \alpha = \frac{1}{\sqrt{5}}, \cos \alpha = \frac{2}{\sqrt{5}}, \operatorname{tg} \alpha = \frac{1}{2}, \operatorname{ctg} \alpha = 2$

Zad. 2

- a) $\frac{119}{169}$
- b) $\frac{24}{85}$
- c) $\frac{2\sqrt{6}}{3}$
- d) $\frac{1}{900}$

Zad. 3

- a) tak
- b) nie
- c) nie
- d) tak
- e) tak
- f) nie
- g) tak
- h) tak

Zad. 4

Zad. 5

- a) $|AC| = 8, |AB| = 10$
- b) $|BC| = 2, |AB| = 2\sqrt{5}$
- c) $|BC| = 9, |AB| = 3\sqrt{10}$
- d) $|AC| = 24, |AB| = 26$

Zad. 9

- a) $\alpha \approx 44^\circ$
- b) $\alpha \approx 83^\circ$

Zad. 6

- a) $P = 108, Obw = 42$
- b) $P = 42, Obw = 32$
- c) $c = 20$

Zad. 10

- a) $\alpha \approx 56^\circ, \beta \approx 34^\circ, \gamma = 90^\circ$
- b) $\alpha \approx 24^\circ, \beta \approx 66^\circ, \gamma = 90^\circ$
- c) $\alpha \approx 25^\circ, \beta \approx 39^\circ, \gamma = 116^\circ$
- d) $\alpha = 60^\circ, \beta = 30^\circ, \gamma = 90^\circ$

Zad. 7

- a) $x \approx 2,38, y \approx 3,11$
- b) $a \approx 14,27, b \approx 4,64$
- c) $m \approx 16,02, n \approx 14,85$
- d) $e = 5,00, f = 5\sqrt{2} \approx 7,07$

Zad. 11

- a) $e = 12, f = 12\sqrt{3}$
- b) $84^\circ, 96^\circ, 84^\circ, 96^\circ$
- c) $\alpha \approx 39^\circ$
- d) $h_1 \approx 9,511, h_2 \approx 13,3154$

Zad. 8

- a) $P = 7$
- b) $P \approx 45,792$

KONIEC