

# Тема: Приложение на тригонометрията в реалния живот

Име: \_\_\_\_\_

Клас: \_\_\_\_\_

Дата: \_\_\_\_\_

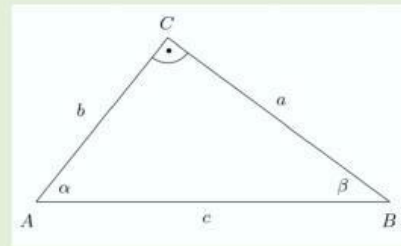
## Част 1. Загрявка (индивидуална работа)

Задача 1: Попълнете липсващите формули

$$\sin \alpha = \text{---}$$

$$\cos \alpha = \text{---}$$

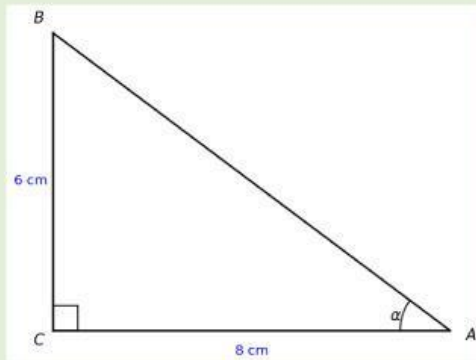
$$\text{tg } \alpha = \text{---}$$



Задача 2: Даден е правоъгълен триъгълник с прилежащ катет 8см и срещулежащ катет 6см.

Намерете:  $\text{tg } \alpha = \text{---}$

$\alpha = \text{---}^\circ$



angle α in °	sin α	cos α	tg α	angle α in °	sin α	cos α	tg α	angle α in °	sin α	cos α	tg α
0	0	1	0	31	0.5141	0.8528	0.6009	62	0.8850	0.4696	1.8807
1	0.0175	0.9998	0.0175	32	0.5299	0.8480	0.6251	63	0.8910	0.4540	1.9613
2	0.0349	0.9994	0.0349	33	0.5450	0.8420	0.6494	64	0.8959	0.4374	2.0419
3	0.0523	0.9980	0.0523	34	0.5603	0.8349	0.6739	65	0.9000	0.4199	2.1225
4	0.0698	0.9958	0.0698	35	0.5758	0.8267	0.6986	66	0.9039	0.4016	2.2031
5	0.0872	0.9928	0.0872	36	0.5915	0.8174	0.7235	67	0.9076	0.3825	2.2837
6	0.1045	0.9891	0.1045	37	0.6074	0.8070	0.7486	68	0.9111	0.3627	2.3643
7	0.1217	0.9847	0.1217	38	0.6235	0.7955	0.7739	69	0.9144	0.3422	2.4449
8	0.1388	0.9796	0.1388	39	0.6398	0.7829	0.7994	70	0.9175	0.3211	2.5255
9	0.1558	0.9739	0.1558	40	0.6563	0.7693	0.8251	71	0.9205	0.2994	2.6061
10	0.1726	0.9676	0.1726	41	0.6730	0.7547	0.8510	72	0.9233	0.2772	2.6867
11	0.1893	0.9608	0.1893	42	0.6898	0.7392	0.8771	73	0.9259	0.2546	2.7673
12	0.2059	0.9535	0.2059	43	0.7068	0.7228	0.9034	74	0.9283	0.2316	2.8479
13	0.2224	0.9457	0.2224	44	0.7239	0.7056	0.9300	75	0.9305	0.2082	2.9285
14	0.2388	0.9374	0.2388	45	0.7412	0.6877	0.9568	76	0.9325	0.1845	3.0091
15	0.2551	0.9286	0.2551	46	0.7586	0.6692	0.9838	77	0.9343	0.1605	3.0897
16	0.2713	0.9193	0.2713	47	0.7762	0.6501	1.0110	78	0.9359	0.1362	3.1703
17	0.2874	0.9096	0.2874	48	0.7939	0.6304	1.0384	79	0.9373	0.1117	3.2509
18	0.3034	0.8995	0.3034	49	0.8117	0.6102	1.0660	80	0.9385	0.0870	3.3315
19	0.3193	0.8890	0.3193	50	0.8296	0.5895	1.0938	81	0.9396	0.0621	3.4121
20	0.3351	0.8781	0.3351	51	0.8476	0.5683	1.1218	82	0.9405	0.0370	3.4927
21	0.3508	0.8668	0.3508	52	0.8657	0.5466	1.1500	83	0.9413	0.0117	3.5733
22	0.3664	0.8551	0.3664	53	0.8839	0.5244	1.1783	84	0.9420	0.0000	3.6539
23	0.3819	0.8430	0.3819	54	0.9022	0.5017	1.2068	85	0.9426	-0.0117	3.7345
24	0.3973	0.8306	0.3973	55	0.9206	0.4785	1.2354	86	0.9430	-0.0234	3.8151
25	0.4126	0.8179	0.4126	56	0.9391	0.4548	1.2642	87	0.9433	-0.0351	3.8957
26	0.4278	0.8049	0.4278	57	0.9577	0.4306	1.2931	88	0.9435	-0.0468	3.9763
27	0.4429	0.7916	0.4429	58	0.9764	0.4059	1.3222	89	0.9436	-0.0585	4.0569
28	0.4579	0.7780	0.4579	59	0.9952	0.3807	1.3514	90	0.9436	-0.0702	4.1375
29	0.4728	0.7641	0.4728	60	1.0141	0.3551	1.3808				
30	0.5244	0.5	0.8750	61	1.0331	0.3291	1.4104				

Задача 3: Свържете тригонометричната функция с приложението:

sin		намиране на височина
cos		намиране на хипотенуза
tg		намиране на наклон