

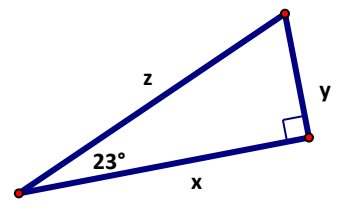
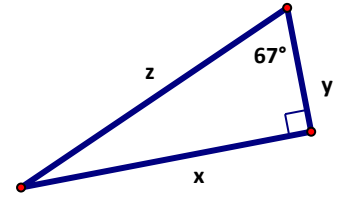
Trigonometry – Sine, Cosine, and Complimentary Angles

G.SRT.C.7

Notes Section 9.2

Name _____

Angle	Sine (sin)	Cosine (cos)	Tangent (tan)	Angle	Sine (sin)	Cosine (cos)	Tangent (tan)
1°	0.0175	0.9998	0.0175	89°	0.9998	0.0175	57.290
2°	0.0349	0.9994	0.0349	88°	0.9994	0.0349	28.636
3°	0.0523	0.9986	0.0524	87°	0.9986	0.0523	19.081
4°	0.0698	0.9976	0.0699	86°	0.9976	0.0698	14.300
5°	0.0872	0.9962	0.0875	85°	0.9962	0.0872	11.430
6°	0.1045	0.9945	0.1051	84°	0.9945	0.1045	9.5144
7°	0.1219	0.9925	0.1228	83°	0.9925	0.1219	8.1443
8°	0.1392	0.9903	0.1405	82°	0.9903	0.1392	7.1154
9°	0.1564	0.9877	0.1584	81°	0.9877	0.1564	6.3138
10°	0.1736	0.9848	0.1763	80°	0.9848	0.1736	5.6713
11°	0.1908	0.9816	0.1944	79°	0.9816	0.1908	5.1446
12°	0.2079	0.9781	0.2126	78°	0.9781	0.2079	4.7046
13°	0.2250	0.9744	0.2309	77°	0.9744	0.2250	4.3315
14°	0.2419	0.9703	0.2493	76°	0.9703	0.2419	4.0108
15°	0.2588	0.9659	0.2679	75°	0.9659	0.2588	3.7321
16°	0.2756	0.9613	0.2867	74°	0.9613	0.2756	3.4874
17°	0.2924	0.9563	0.3057	73°	0.9563	0.2924	3.2709
18°	0.3090	0.9511	0.3249	72°	0.9511	0.3090	3.0777
19°	0.3256	0.9455	0.3443	71°	0.9455	0.3256	2.9042
20°	0.3420	0.9397	0.3640	70°	0.9397	0.3420	2.7475
21°	0.3584	0.9336	0.3839	69°	0.9336	0.3584	2.6051
22°	0.3746	0.9272	0.4040	68°	0.9272	0.3746	2.4751
23°	0.3907	0.9205	0.4245	67°	0.9205	0.3907	2.3559
24°	0.4067	0.9135	0.4452	66°	0.9135	0.4067	2.2460
25°	0.4226	0.9063	0.4663	65°	0.9063	0.4226	2.1445
26°	0.4384	0.8988	0.4877	64°	0.8988	0.4384	2.0503
27°	0.4540	0.8910	0.5095	63°	0.8910	0.4540	1.9626
28°	0.4695	0.8829	0.5317	62°	0.8829	0.4695	1.8807
29°	0.4848	0.8746	0.5543	61°	0.8746	0.4848	1.8040
30°	0.5000	0.8660	0.5774	60°	0.8660	0.5000	1.7321
31°	0.5150	0.8572	0.6009	59°	0.8572	0.5150	1.6643
32°	0.5299	0.8480	0.6249	58°	0.8480	0.5299	1.6003
33°	0.5446	0.8387	0.6494	57°	0.8387	0.5446	1.5399
34°	0.5592	0.8290	0.6745	56°	0.8290	0.5592	1.4826
35°	0.5736	0.8192	0.7002	55°	0.8192	0.5736	1.4281
36°	0.5878	0.8090	0.7265	54°	0.8090	0.5878	1.3764
37°	0.6018	0.7986	0.7536	53°	0.7986	0.6018	1.3270
38°	0.6157	0.7880	0.7813	52°	0.7880	0.6157	1.2799
39°	0.6293	0.7771	0.8098	51°	0.7771	0.6293	1.2349
40°	0.6428	0.7660	0.8391	50°	0.7660	0.6428	1.1918
41°	0.6561	0.7547	0.8693	49°	0.7547	0.6561	1.1504
42°	0.6691	0.7431	0.9004	48°	0.7431	0.6691	1.1106
43°	0.6820	0.7314	0.9325	47°	0.7314	0.6820	1.0724
44°	0.6947	0.7193	0.9657	46°	0.7193	0.6947	1.0355
45°	0.7071	0.7071	1.0000				



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Name _____

Find the value of x .

#1) $\sin(x) = \cos(23^\circ)$

$$x + 23 = 90$$

$$x = 67^\circ$$

#2) $\sin(65^\circ) = \cos(x)$

$$65 + x = 90$$

$$x = 25^\circ$$

#3) $\sin(30^\circ) = \cos(x)$

$$30 + x = 90$$

$$x = 60^\circ$$

#4) $\sin(x) = \cos(60^\circ)$

$$x + 60 = 90^\circ$$

$$x = 30^\circ$$

#5) $\sin(x) = \cos(45^\circ)$

$$x + 45 = 90$$

$$x = 45^\circ$$

#6) $\sin(2x + 1)^\circ = \cos(40^\circ)$

$$(2x + 1) + (40) = 90$$

$$2x + 41 = 90$$

$$2x = 49$$

$$x = \frac{49}{2}$$

#7) $\sin(x - 10)^\circ = \cos(6x + 40)^\circ$

$$(x - 10) + (6x + 40) = 90$$

$$7x + 30 = 90$$

$$7x = 60$$

$$x = \frac{60}{7}$$

#8) $\sin\left(\frac{1}{2}x - 5\right)^\circ = \cos(x - 30)^\circ$

$$\left(\frac{1}{2}x - 5\right) + (x - 30) = 90$$

$$x - 10 + 2x - 60 = 180$$

$$3x - 70 = 180$$

$$3x = 250$$

$$x = \frac{250}{3}$$