2.

Using the table (at the end of this packet or from my web site), find m∠A in each case.

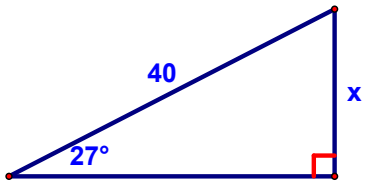
a. sin ∠A = .4067

b. tan ∠A = 3.4874

c. cos ∠A = .7071

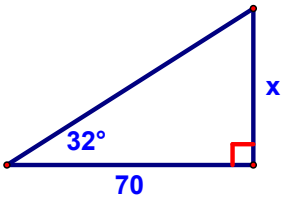
4a.

Find x to the nearest integer



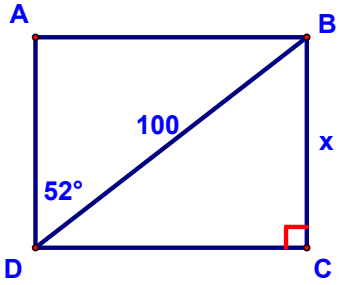
4b.

Find x to the nearest integer



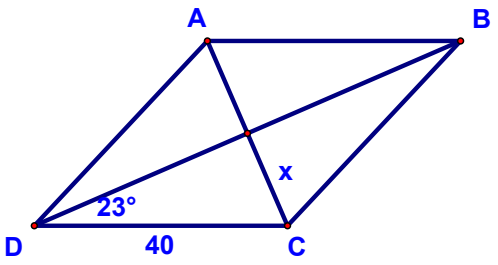
4c.

Find x to the nearest integer - ABCD is a rectangle!!



4d.

Find x to the nearest integer - ABCD is a rhombus!!



9.

Find, to the nearest degree, the angles of a 3, 4, 5 triangle

11.

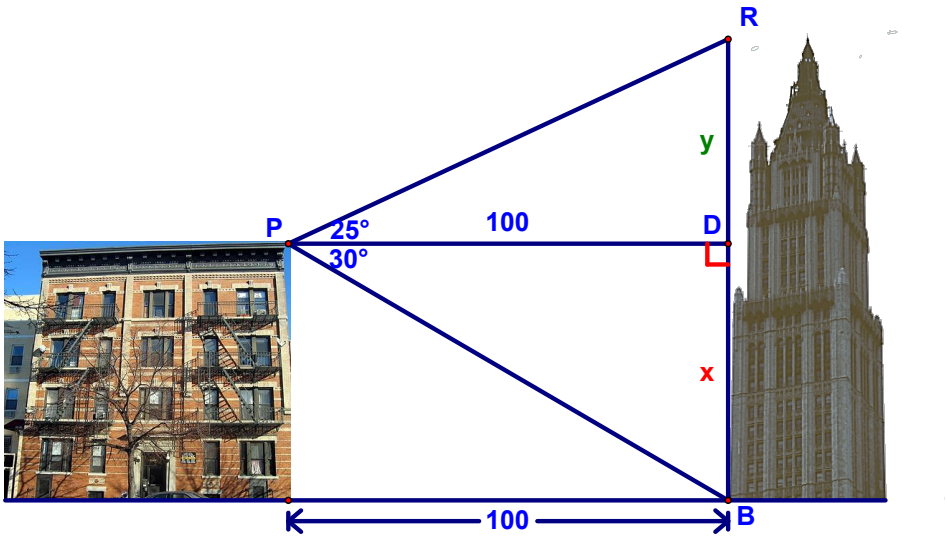
The legs of an isosceles triangle are each 18. The base is 14.

a. Find the base angles to the nearest degree

b. Find the exact length of the altitude to the base

15.

Two buildings are 100 dm apart across a street. A sunbather at point P finds the angle of elevation of the roof of the taller building to be 25° and the angle of depression of its base to be 30°. Find the height of the taller building to the nearest decimeter.



18.

Find the height, PB, of a mountain whose base and peak are inaccessible. At point A the angle of elevation of the peak is 30°. One kilometer closer to the mountain, at point C, the angle of elevation is 35°.

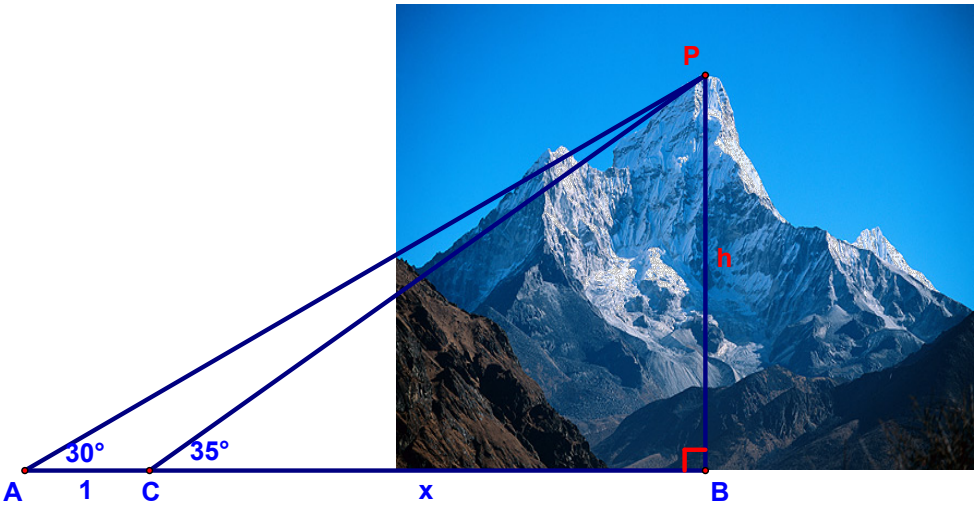


Table of Trigonometric Ratios

Degree of Angle	Sin	Cos	Tan	Degree of Angle	Sin	Cos	Tan
0	0.0000	1.0000	0.0000	46	0.7193	0.6947	1.0355
1	0.0175	0.9998	0.0175	47	0.7314	0.6820	1.0724
2	0.0349	0.9994	0.0349	48	0.7431	0.6691	1.1106
3	0.0523	0.9986	0.0524	49	0.7547	0.6561	1.1504
4	0.0698	0.9976	0.0699	50	0.7660	0.6428	1.1918
5	0.0872	0.9962	0.0875	51	0.7771	0.6293	1.2349
6	0.1045	0.9945	0.1051	52	0.7880	0.6157	1.2799
7	0.1219	0.9925	0.1228	53	0.7986	0.6018	1.3270
8	0.1392	0.9903	0.1405	54	0.8090	0.5878	1.3764
9	0.1564	0.9877	0.1584	55	0.8192	0.5736	1.4281
10	0.1736	0.9848	0.1763	56	0.8290	0.5592	1.4826
11	0.1908	0.9816	0.1944	57	0.8387	0.5446	1.5399
12	0.2079	0.9781	0.2126	58	0.8480	0.5299	1.6003
13	0.2250	0.9744	0.2309	59	0.8572	0.5150	1.6643
14	0.2419	0.9703	0.2493	60	0.8660	0.5000	1.7321
15	0.2588	0.9659	0.2679	61	0.8746	0.4848	1.8040
16	0.2756	0.9613	0.2867	62	0.8829	0.4695	1.8807
17	0.2924	0.9563	0.3057	63	0.8910	0.4540	1.9626
18	0.3090	0.9511	0.3249	64	0.8988	0.4384	2.0503
19	0.3256	0.9455	0.3443	65	0.9063	0.4226	2.1445
20	0.3420	0.9397	0.3640	66	0.9135	0.4067	2.2460
21	0.3584	0.9336	0.3839	67	0.9205	0.3907	2.3559
22	0.3746	0.9272	0.4040	68	0.9272	0.3746	2.4751
23	0.3907	0.9205	0.4245	69	0.9336	0.3584	2.6051
24	0.4067	0.9135	0.4452	70	0.9397	0.3420	2.7475
25	0.4226	0.9063	0.4663	71	0.9455	0.3256	2.9042
26	0.4384	0.8988	0.4877	72	0.9511	0.3090	3.0777
27	0.4540	0.8910	0.5095	73	0.9563	0.2924	3.2709
28	0.4695	0.8829	0.5317	74	0.9613	0.2756	3.4874
29	0.4848	0.8746	0.5543	75	0.9659	0.2588	3.7321
30	0.5000	0.8660	0.5774	76	0.9703	0.2419	4.0108
31	0.5150	0.8572	0.6009	77	0.9744	0.2250	4.3315
32	0.5299	0.8480	0.6249	78	0.9781	0.2079	4.7046
33	0.5446	0.8387	0.6494	79	0.9816	0.1908	5.1446
34	0.5592	0.8290	0.6745	80	0.9848	0.1736	5.6713
35	0.5736	0.8192	0.7002	81	0.9877	0.1564	6.3138
36	0.5878	0.8090	0.7265	82	0.9903	0.1392	7.1154
37	0.6018	0.7986	0.7536	83	0.9925	0.1219	8.1443
38	0.6157	0.7880	0.7813	84	0.9945	0.1045	9.5144
39	0.6293	0.7771	0.8098	85	0.9962	0.0872	11.4301
40	0.6428	0.7660	0.8391	86	0.9976	0.0698	14.3007
41	0.6561	0.7547	0.8693	87	0.9986	0.0523	19.0811
42	0.6691	0.7431	0.9004	88	0.9994	0.0349	28.6363
43	0.6820	0.7314	0.9325	89	0.9998	0.0175	57.2900
44	0.6947	0.7193	0.9657	90	1.0000	0.0000	
45	0.7071	0.7071	1.0000				