

Trig 5.5-5.6

Solve right triangles
Solve triangles using law of sines
Find areas of triangles

Geom. 8.6

law of sines

$$\frac{a}{\sin A} = \frac{b}{\sin B}$$

oblique triangle

Quiz Fri. 5.5-5.6

activity: whiteboards

Lesson 5-5 (Pages 305–312)

Evaluate each expression. Assume that all angles are in Quadrant I.

1. $\sin\left(\arcsin \frac{3}{4}\right)$

$$\frac{3}{4}$$

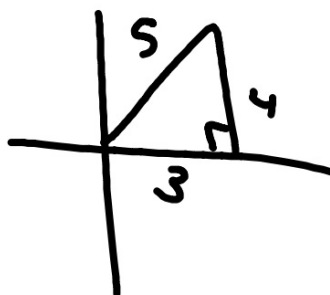
2. $\sec\left(\cos^{-1} \frac{1}{2}\right)$

$$\frac{1}{\frac{1}{2}}$$

3. $\cot(\tan^{-1} 1)$

$$1$$

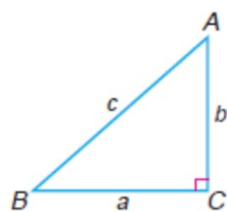
$$\sin\left(\cos^{-1} \frac{3}{5}\right)$$
$$\sin(\quad) = \frac{4}{5}$$



Solve each problem. Round to the nearest tenth.

4. If $a = 38$ and $b = 25$, find A .

5. If $c = 19$ and $b = 17$, find B .

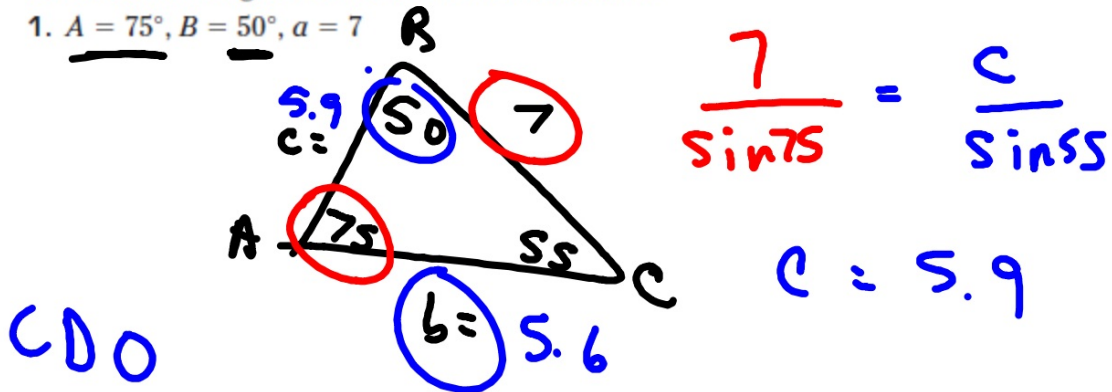


Might not be a right triangle... don't assume...

Lesson 5-6 (Pages 313-318)

Solve each triangle. Round to the nearest tenth.

1. $A = 75^\circ, B = 50^\circ, a = 7$



$$\frac{7}{\sin 75} = \frac{c}{\sin 55}$$

$$c = 5.9$$

CDO

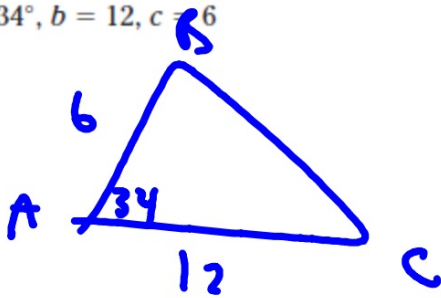
3. $B = 49^\circ, C = 32^\circ, a = 10$

4. $A = 22^\circ, C = 41^\circ, b = 25$

SAS

Find the area of each triangle. Round to the nearest tenth.

5. $A = 34^\circ, b = 12, c = 6$



6. $B = 56.8^\circ, A = 87^\circ, c = 6.8$

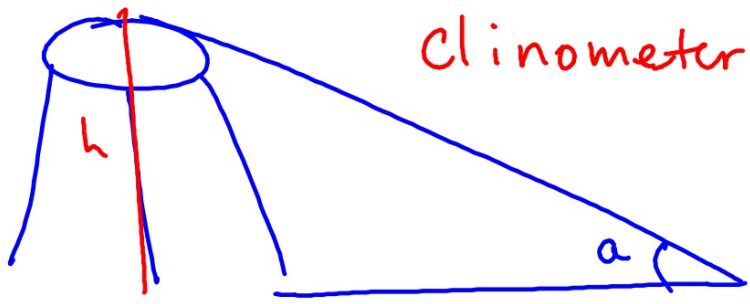
$$K = \frac{1}{2} ab \sin C$$
$$\frac{1}{2} \cdot 6 \cdot 12 \sin 34$$

7. $a = 8, B = 60^\circ, C = 75^\circ$

8. $A = 43^\circ, b = 16, c = 12$

WB S.6

Project due Tues



$$\tan a = \frac{h}{d}$$