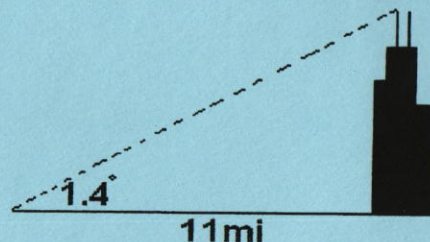
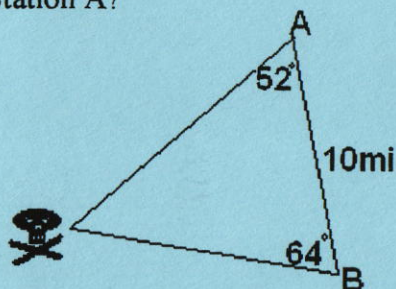


Word Problems

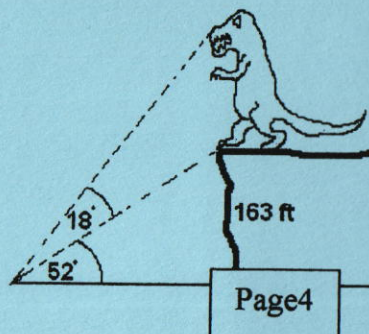
1. Find the height, in feet of the Sears Tower. 1 mile = 5,280 feet



2. **Triangulating location:** Signal station A and B are 10 miles apart. Station A detects a "bogey" at 52 degrees and Signal Station B detects the same "bogey" at an angle of 64 degrees. How far is the bogey from Station A?



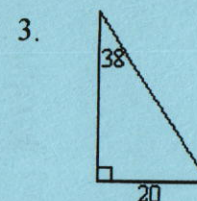
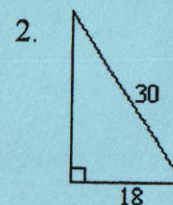
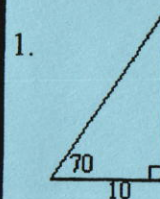
3. Godzilla is standing on the edge of a cliff. The angle of elevation to the top of the cliff is 52°. The angle from the top of the cliff to Godzilla's head is 18°. If the cliff is 163 ft high, how tall is Godzilla?



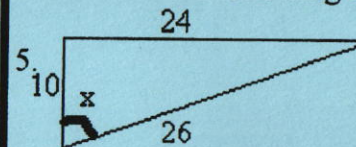
NAME:

ALGEBRA II HONORS TRIG Review

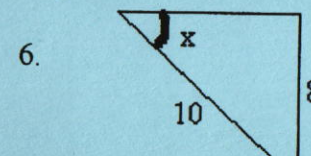
Using SohCahToa, solve each of the following triangles



For each of the following identify the trig values 6



$$\begin{aligned}\sin x &= & \csc x &= \\ \cos x &= & \sec x &= \\ \tan x &= & \cot x &= \end{aligned}$$

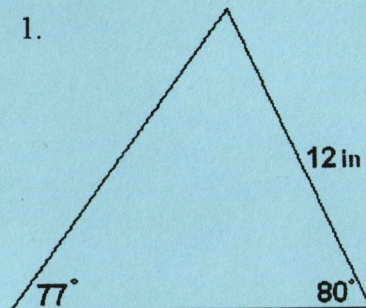


$$\begin{aligned}\sin x &= & \csc x &= \\ \cos x &= & \sec x &= \\ \tan x &= & \cot x &= \end{aligned}$$

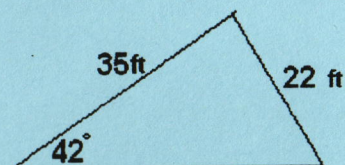
LAW OF SINES

Use the Law of Sines to solve each of the following

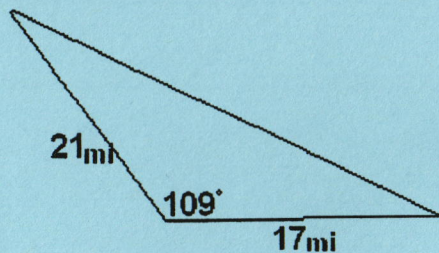
1.



2.



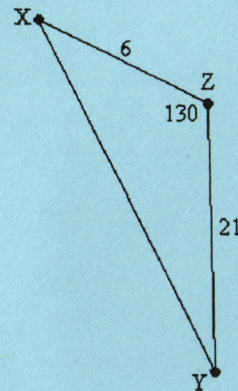
3. Find the area of the triangle



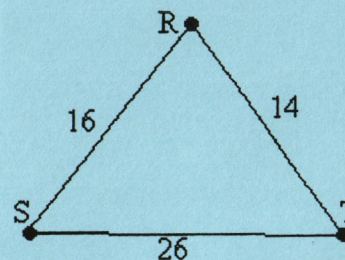
Law of Cosines

Use the Law of Cosines to solve the following triangles

1.



2.

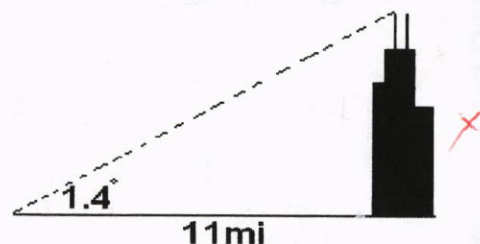


Word Problems

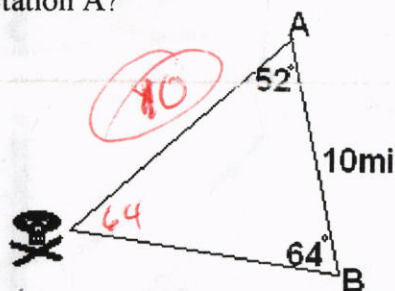
1. Find the height, in feet of the Sears Tower. 1 mile = 5,280 feet

$$\tan 1.4 = \frac{x}{5280}$$

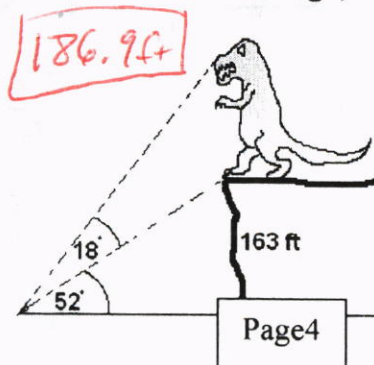
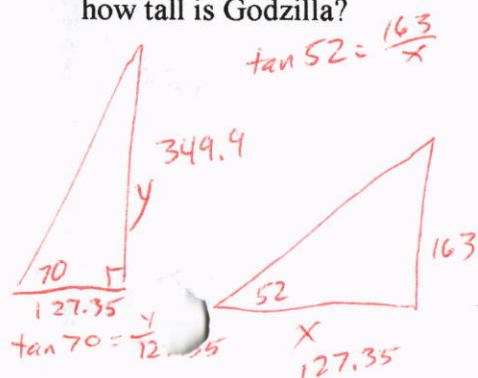
$$1,420 \text{ ft.}$$



2. **Triangulating location:** Signal station A and B are 10 miles apart. Station A detects a "bogy" at 52 degrees and Signal Station B detects the same "bogy" at an angle of 64 degrees. How far is the bogy from Station A?



3. Godzilla is standing on the edge of a cliff. The angle of elevation to the top of the cliff is 52° . The angle from the top of the cliff to Godzilla's head is 18° . If the cliff is 163 ft high, how tall is Godzilla?

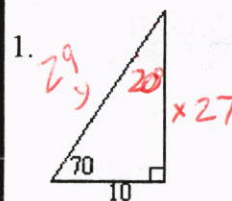


NAME: *Bolan*

ALGEBRA II HONORS

TRIG Review

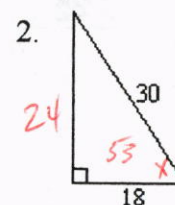
Using SohCahToa, solve each of the following triangles



$$\tan 70 = \frac{x}{10}$$

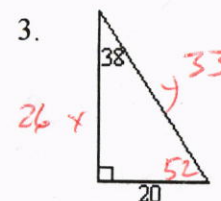
$$\sin 70 = \frac{x}{20}$$

$$\cos 70 = \frac{10}{y}$$



$$\tan x = \frac{24}{18}$$

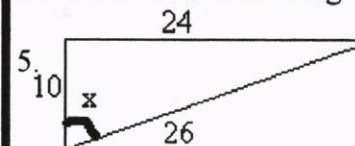
$$\tan y = \frac{18}{24}$$



$$\cos 52 = \frac{20}{y}$$

$$\tan 52 = \frac{x}{20}$$

For each of the following identify the trig values 6



$$\sin x = \frac{10}{26}$$

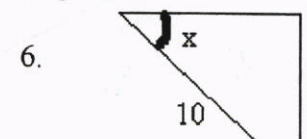
$$\cos x = \frac{24}{26}$$

$$\tan x = \frac{10}{24}$$

$$\csc x = \frac{26}{10}$$

$$\sec x = \frac{26}{24}$$

$$\cot x = \frac{24}{10}$$



$$\sin x = \frac{6}{10}$$

$$\cos x = \frac{8}{10}$$

$$\tan x = \frac{6}{8}$$

$$\csc x = \frac{10}{6}$$

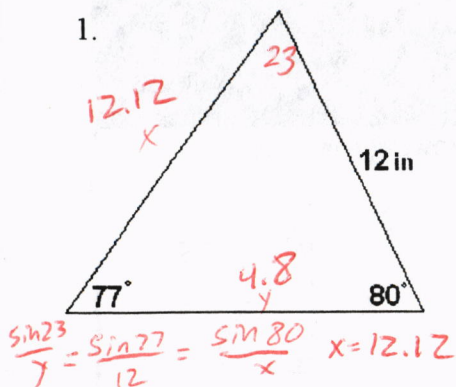
$$\sec x = \frac{10}{8}$$

$$\cot x = \frac{8}{6}$$

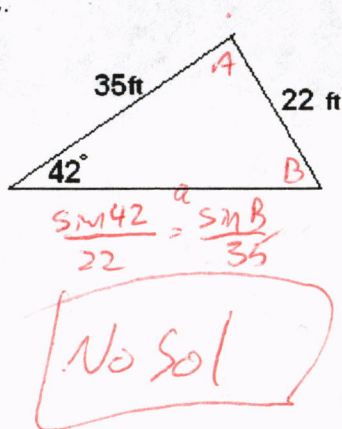
LAW OF SINES

Use the Law of Sines to solve each of the following

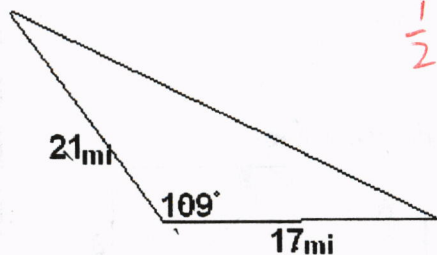
1.



2.



3. Find the area of the triangle



$$A = \frac{1}{2} a b \sin C$$

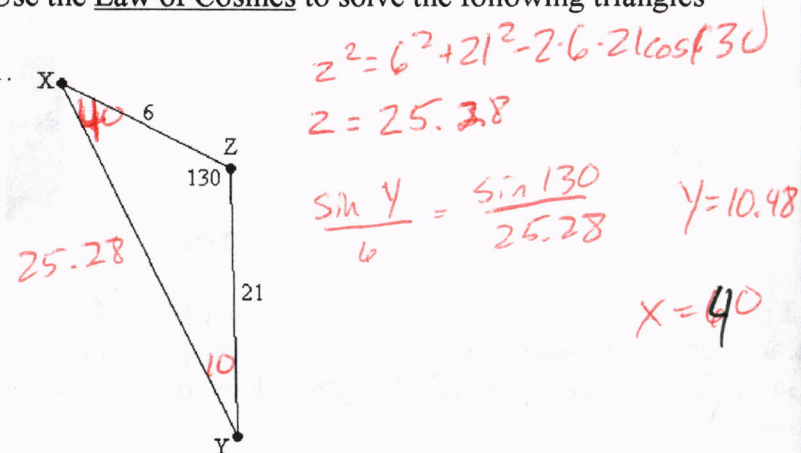
$$\frac{1}{2} \cdot 21 \cdot 17 \cdot \sin 109$$

$$168.8 \text{ mi}^2$$

Law of Cosines

Use the Law of Cosines to solve the following triangles

1.



2.

