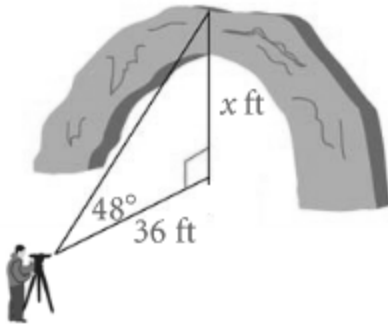
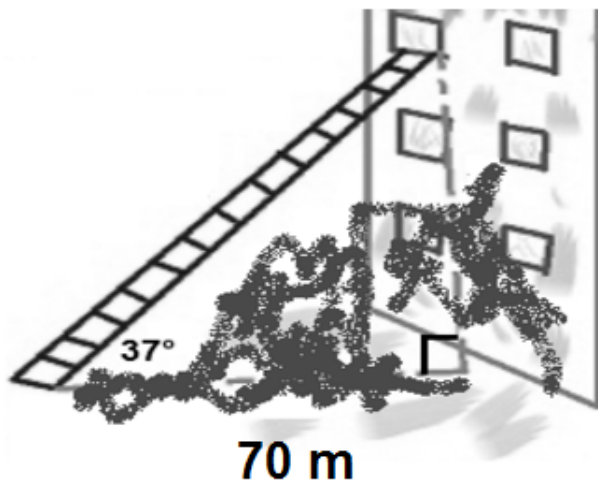


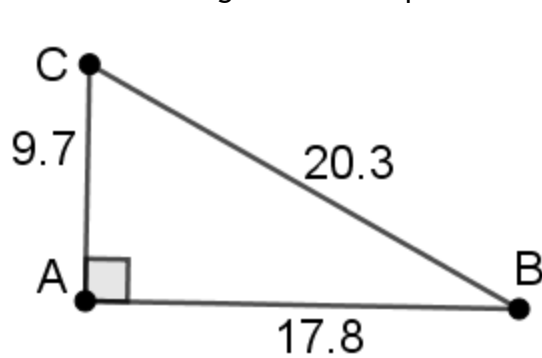
1. Determine x , the height of the arc. Leave trigonometric expressions unevaluated (aka, no table)



2. How long must the ladder be? Leave trigonometric expressions unevaluated (aka, no table)



3. List all trigonometric expressions that would give the stated ratio



a. $\frac{17.8}{20.3}$ c. $\frac{17.8}{9.7}$

b. $\frac{9.7}{17.8}$ d. $\frac{9.7}{20.3}$

4. If $\sin \angle A = \frac{20}{29}$ and $\cos \angle A = \frac{21}{29}$, what is the value of $\tan \angle A$?

5. Provide the following trigonometric ratios. Express as side names and numbers

a. $\sin C$

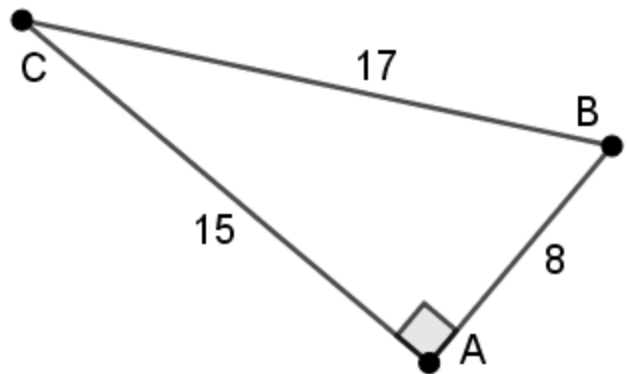
b. $\tan(B)$

c. $\cos B$

d. $\tan C$

e. $\cos(C)$

f. $\sin B$



6. You want to build a wooden triangle with a 6 inch side, a 9 inch side, and a 8 inch side. Will this be an acute triangle, an obtuse triangle, or a right triangle?

7. Fill in the blanks

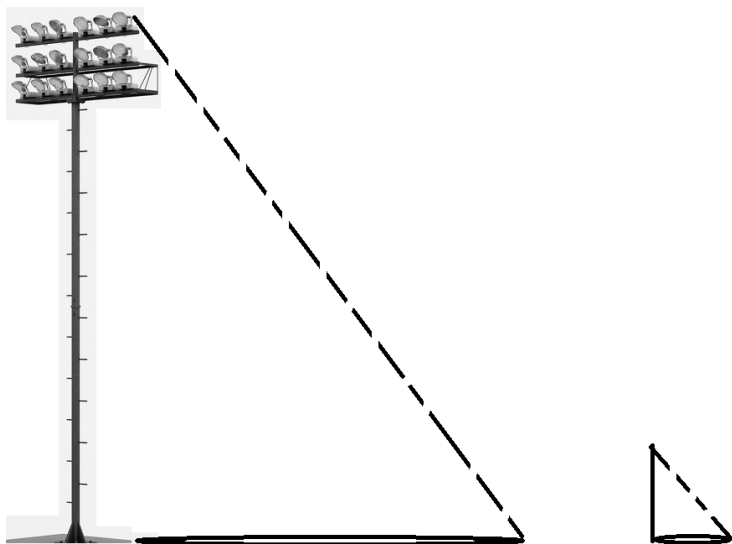
a. $\sin(40^\circ) = \cos(\text{____})$

b. $\sin(15^\circ) = \cos(\text{____})$

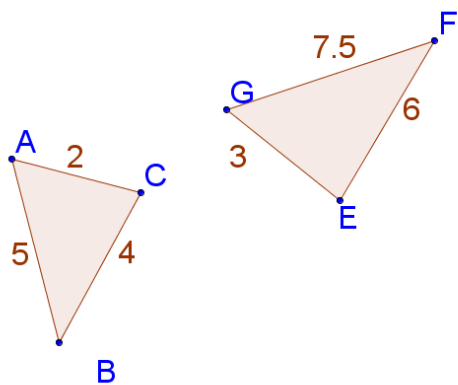
c. $\cos(12^\circ) = \sin(\text{____})$

d. $\cos(45^\circ) = \sin(\text{____})$

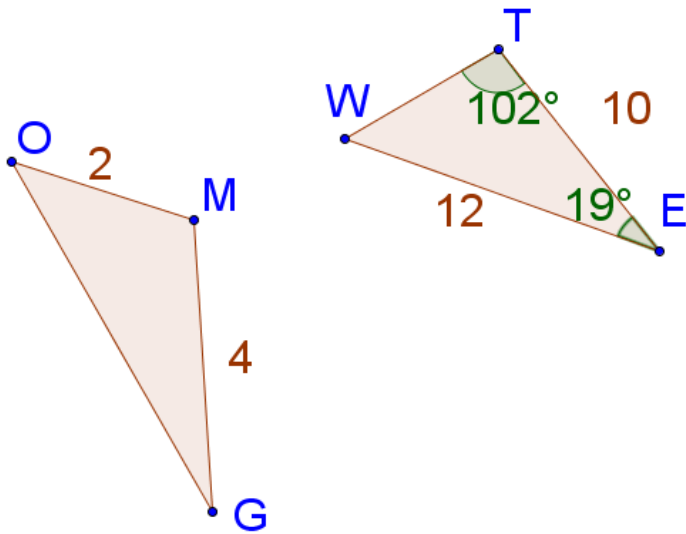
8. The pole casts a shadow that is 50 feet long. A person casts a shadow that is 3.6 feet long. The person is 5.5 feet tall. How tall is the pole?



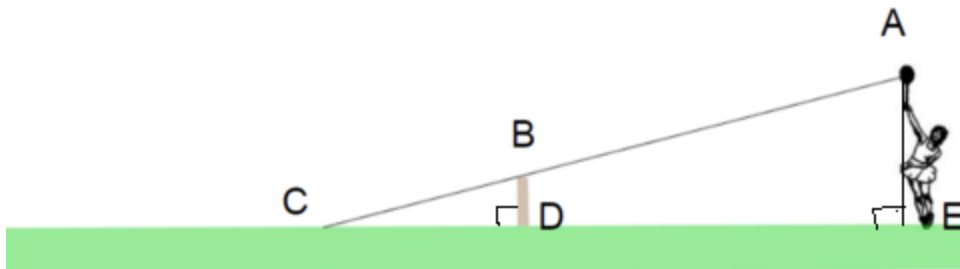
1. Are the two triangles similar? Why or why not? Show your work.



1. If $\triangle OMG \sim \triangle WTE$, find determine the length of $\overline{WT}$



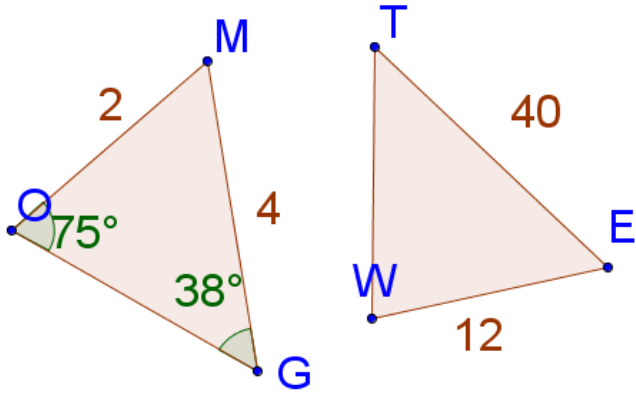
2. Patty wants her serve to land 8 feet past the net. She can reach 9 feet high. The net is 3 feet tall. How far away from Patty will the ball land?



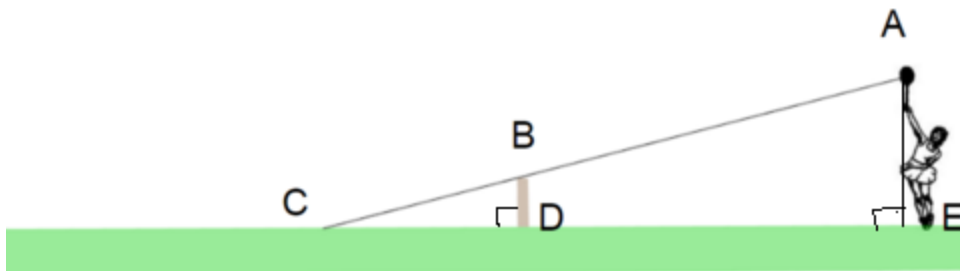
3. The LG 24LM530S-PU monitor has a diagonal of 23.6". If the bottom side is 18", how tall is the monitor?



4. If $\triangle OMG \sim \triangle WTE$, find determine the length of $\overline{OG}$



5. Patty wants her serve to land 6 feet past the net. She can reach 10 feet high. The net is 2.5 feet tall. How far away from Patty will the ball land?



6. A window has a diagonal length of 20" and a height of 12". How long is the bottom length of the window?