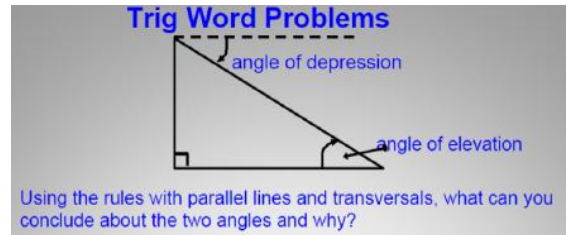
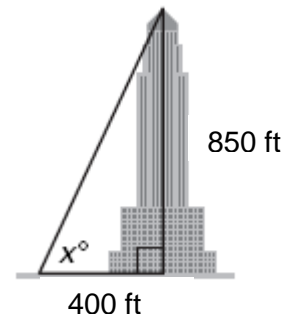


Steps to solving trig word problems

1. Draw a picture. (Right triangle)
2. Label the given parts.
3. Set up the trig ratios and solve.



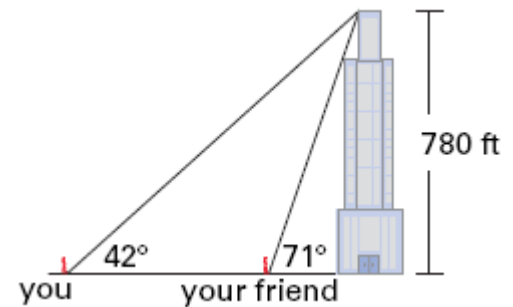
- Ex1)** Find the angle of elevation if you are standing 400 ft. away and the building is 850 ft. tall?



- Ex2)** From the top of a tower, the angle of depression to a stake on the ground is 60° . The top of the tower is 80 feet above ground. How far is the stake from the foot of the tower?

- Ex3)** A ladder leaning against a house makes an angle of 30° with the ground. The foot of the ladder is 7 feet from the foot of the house. How long is the ladder?

Ex4) You are a block away from a skyscraper that is 780 feet tall. Your friend is between the skyscraper and yourself. The angle of elevation from your position to the top of the skyscraper is 42° . The angle of elevation from your friend's position to the top of the skyscraper is 71° . To the nearest foot, how far are you from your friend?



Sometimes you need to add lines to your drawing to create right triangles.

Find the distance of BC.

Hint: add the altitude from vertex B.

