

## Practicing Trigonometry #3

Use your calculator to convert the ratio to the angle size (to 2 decimal places)

	Ratio	Angle size
1	(sin) 0.34	
2	(cos) 0.5	
3	(tan) 0.466	
4	(sin) 0.951	
5	(cos) 0.574	
6	(tan) 0.268	

Using the give equations, solve for the variable:

7.  $\sin 20 = \frac{a}{15}$

8.  $\cos 37 = \frac{b}{30}$

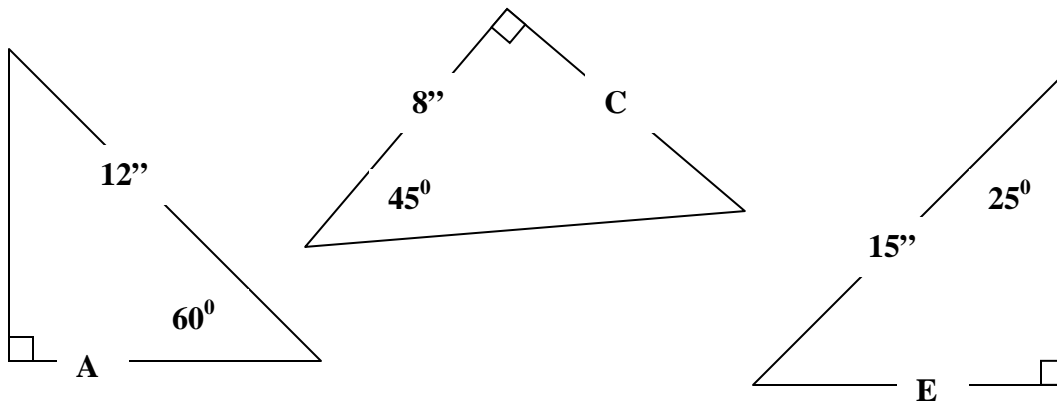
9.  $\tan 64 = \frac{c}{5}$

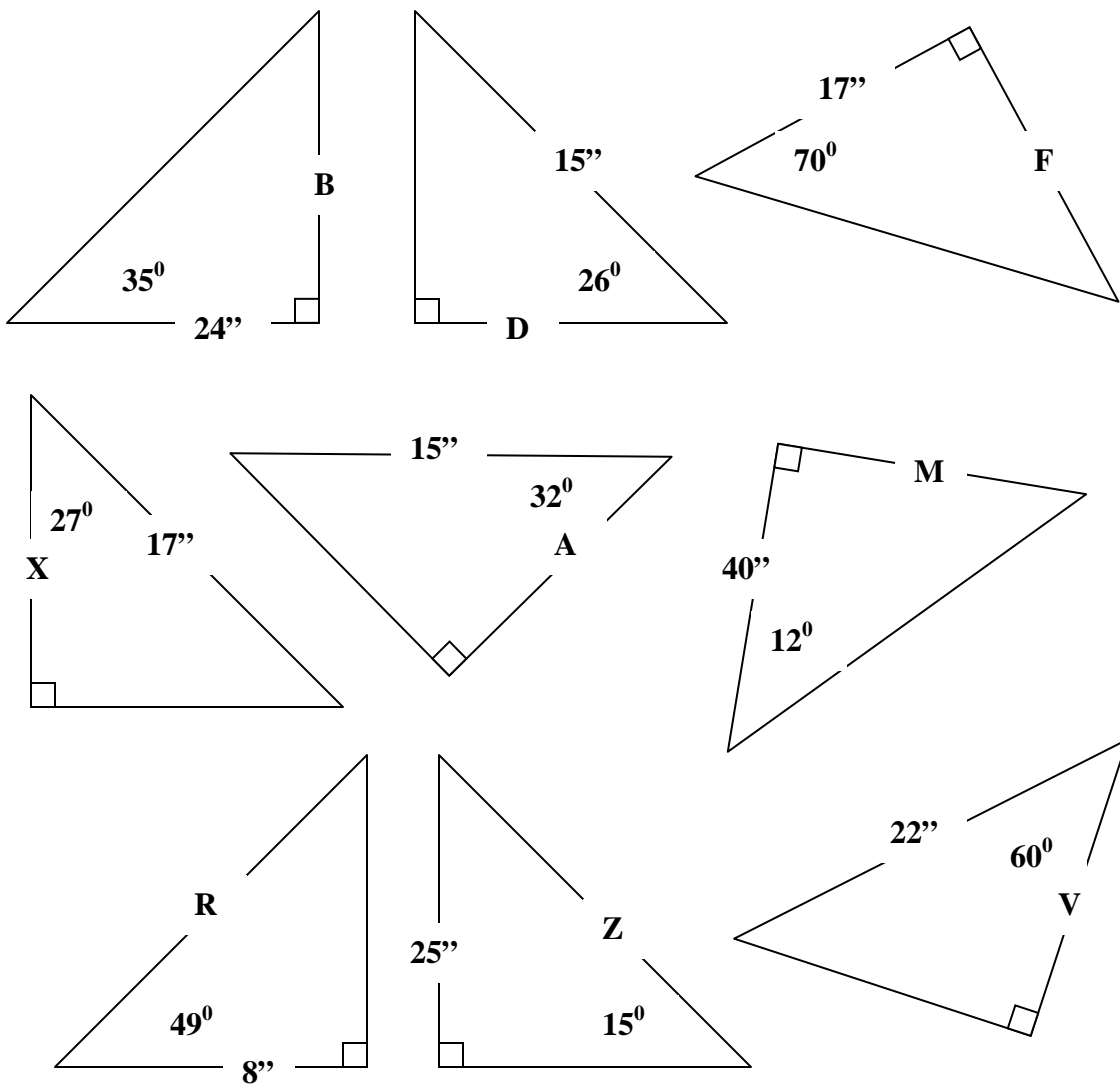
10.  $\sin 52 = \frac{d}{32}$

11.  $\cos 10 = \frac{e}{18}$

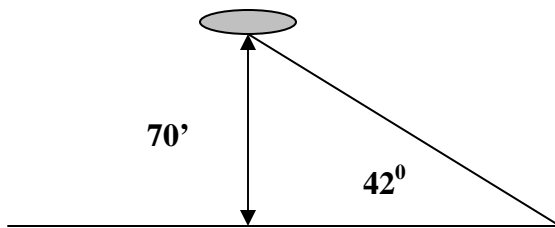
12.  $\tan 25 = \frac{f}{22}$

Solve for the variable in the following triangles. (Answers to 2 decimal places)





25. An advertising zeppelin is 70 yards above the ground and is tethered with a wire that makes an angle of  $42^\circ$  to the ground. How long is the wire?



26. A surveyor measures the angle of elevation from eye level to the top of a building is  $60^{\circ}$ . If he is standing 48' away from the building and he is 6' tall, how tall is the building?

27. A flagpole is held upright by 30 yard long wires to the ground. If the wires make an angle of  $25^{\circ}$  to the ground, how tall is the flagpole?