





Right Triangle Trig Review

Name: _____

1. Find sin A.	
2. Find cos A.	A
3. Find tan A.	12 13
4. Find sin <i>B</i> .	c 5 B
5. Find cos <i>B</i> .	
6. $\triangle ABC$ is a right triangle. One of the acute angles is 38°. What is the cosine of the other acute angle?	7. For which value of θ is $\cos \theta = \sin 73^{\circ}$?
8. Use your calculator to find the sine of 61°.	9. For which value of θ is $\sin \theta = \cos 64^{\circ}$?
10. Find $\overline{AB}, m \angle C, and b \angle A$.	
$A = \frac{B}{22.5}$	

11. A 12-foot ladder is placed against a wall. The ladder is at an angle of 72.5° to the level ground. About how far up the wall will the top of the ladder reach?	12. You see a hiker sitting on a bench taking a water break at the top of a hill at a 60° angle of elevation. Your eye level is 5 feet off the ground and you are standing 100 meters from the base of the hill. At what altitude is the hiker sitting on the bench?
13. The height of a building is 75 meters. What is the angle of elevation of the sun when the building casts a shadow that is 60 meters long?	14. An 8 foot ladder is leaning against a wall so that the base is 5 feet from the base of the wall. What angle does the ladder make with the ground?
15. A naval ship is stationed in calm waters. The sonar detects a submarine at a depth of about 400 meters and a horizontal distance of 600 meters. What is the distance between the ship and the submarine?	16. A kite is being flown using 150 yards of string. The kite has an angle of elevation with the ground of 65 degrees. How high above the ground is the kite?
17. Two buildings are 15 meters apart. The height of the shorter building is 22 meters. The angle of elevation from the roof of the shorter building to the roof of the taller building is 40°. What is the height of the taller building?	
Taller building	
<u>40°</u> 15 m	
Shorter building 22 m	