

Name: _____

SHOW ALL YOUR WORK FOR EACH PROBLEM TO GET FULL CREDIT.
PLEASE BE NEAT.

Direction: Read through sections 5.2 and 5.3 in your book and answer the following questions.

1. Correct the following wrong identities (Section 5.2):

$$\sin(\theta) = \frac{1}{\sec(\theta)}, \quad \tan(\theta) = \frac{\cos(\theta)}{\sin(\theta)}$$

2. Cofunction Identities (Section 5.2): $\cos(49^\circ) = \sin(??)$
 $\tan(49^\circ) = \cot(??)$

3. Use an identity to find the value of each expression. Do not use a calculator.
(Section 5.2)

a. $\sin^2 67^\circ + \cos^2 67^\circ$

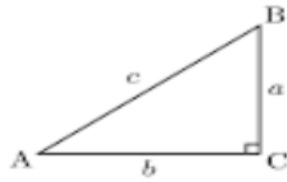
b. $\tan 41^\circ - \frac{\cos 49^\circ}{\cos 41^\circ}$

4. True or False. If false, correct it.

a) If θ is an acute angle and $\sec(\theta) = 3$, then $\cos(\theta) = -3$.

b) Exact values can be found for the sine of any angle.

c) The reference angle is always an acute angle.



5. In the above triangle, if $A = 45^\circ$ and $a = 1$, what can we say about B , b and c ?
What kind of special triangle is this one?

6. In the above triangle, if $A = 30^\circ$, and $a = 1$, what can we say about B , b and c ?
What kind of special triangle is this one?