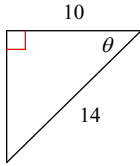


## SM3 HW #6-1 (Trig Ratios)

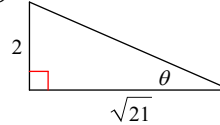
Date \_\_\_\_\_ Period \_\_\_\_\_

Find the value of the trig function indicated. Do not give these values in decimal form. I want them in fraction form with simplified radicals (if applicable).

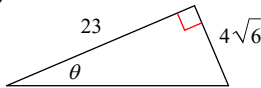
1)  $\tan \theta$



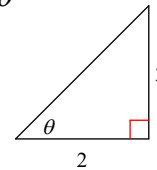
2)  $\sin \theta$



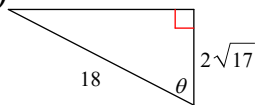
3)  $\cot \theta$



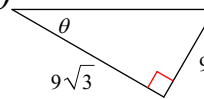
4)  $\csc \theta$



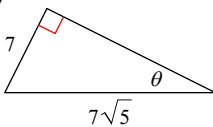
5)  $\sec \theta$



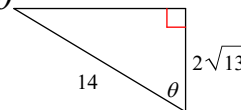
6)  $\sin \theta$



7)  $\sin \theta$



8)  $\cot \theta$



In each triangle ABC, angle C is a right angle, little side 'a' is opposite angle A, etc. Find the value of the trig function indicated (in simplified radical form if applicable).

9) Find  $\csc A$  if  $b = 24$ ,  $a = 24$

10) Find  $\cot A$  if  $a = 8$ ,  $c = 17$

11) Find  $\csc A$  if  $b = 12$ ,  $c = 4\sqrt{10}$

12) Find  $\cos A$  if  $c = 2\sqrt{2}$ ,  $b = 2$

13) Find  $\sin A$  if  $b = \sqrt{17}$ ,  $a = 8$

14) Find  $\tan A$  if  $b = 15$ ,  $c = 23$

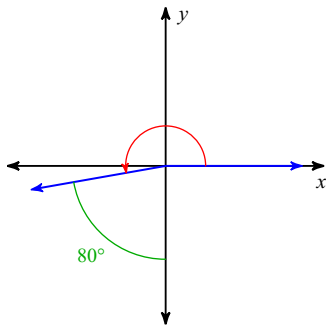
Find the measure of each:

a) Standard Position angle

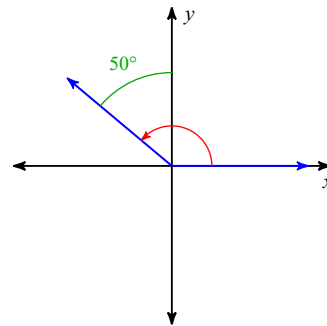
b) Reference Angle

c) In which quadrant is the terminal side of the angle?

15)



16)



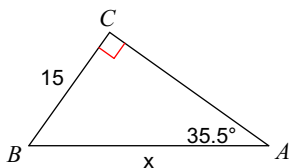
17) For what type of triangles are "trig ratios" valid?

18) Describe what a "standard position angle" is.

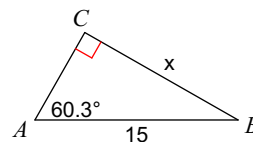
19) If trigonometric ratios are only defined for right triangles, and right triangles do not have obtuse angles, how is it possible to find the sine of 120 degrees?

Find the measure of each side indicated. Round to the nearest tenth.

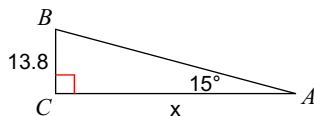
20)



21)



22)



23)

