T-1 Worksheet

Name: _____

Find the four-significant-digit approximation of the given trigonometric function values:

1. $\sin 13°24' =$ 2. $\csc 74°82' =$ 3. $\tan 39°58' =$ 4. $\tan 80°15' =$

5. $\cot 38°47' =$ 6. $\cot 56° =$ 7. $\sin 47°15' =$ 8. $\cos 3°5' =$
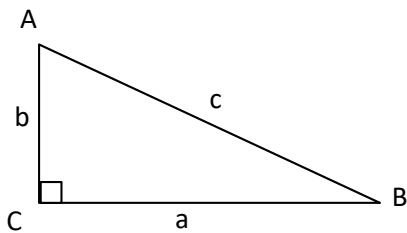
Find the measure of each positive acute angle A to the nearest minute:

9. $\cos A = 0.9879$ 10. $\csc A = 5.988$ 11. $\cos A = 0.9116$ 12. $\tan A = 3.5792$

13. $\sin A = 0.7595$ 14. $\sec A = 3.514$ 15. $\sec A = 1.437$

Find the required function:

16.   Given $\cot A = \dfrac{3}{2}$ 17.   Given $\sin 45° = \dfrac{\sqrt{2}}{2}$

   $\sec A =$ $\cos 45° =$

   $\tan 45° =$

Any trigonometric function of a positive acute angle is equal to the co-function of the complementary angle. (Cosine literally means "complement's sine"; cotangent means "complement's tangent"; and cosecant means "complement's secant.")

$$\sin A = \cos B = \frac{a}{c} \qquad \cos A = \sin B = \frac{b}{c}$$

$$\tan A = \cot B = \frac{a}{b} \qquad \sec A = \csc B = \frac{c}{b}$$

Use the information above to complete the following:

18. $\tan 18° = \cot$ _____   19. $\cos 27°15' = \sin$ _____   20. $\tan 48°13' =$ _____ $41°47'$

State the quadrant in which each angle terminates:

21.   190°   22.   245°   23.   222°   24.   288°   25.   214°   26. 93°

27.   Find the exact values for all six trig functions of 30°.