



ESSAY. Write your answer in the space provided or on a separate sheet of paper.

Convert the angle to decimal degree notation. Round your answer to two decimal places.

1) $14^{\circ}9'$

2) $-66^{\circ}44'50''$

3) $-257^{\circ}23'10''$

4) $293^{\circ}13'44''$

Convert the angle to DMS notation. Round your answer to the nearest second.

5) 29.27°

6) 69.675°

7) 115.5717°

Convert the angle from degrees to radians. Express the answer as a multiple of π .

8) 30°

9) -36°

10) 510°

11) -810°

Convert the angle from radians to degrees.

12) $\frac{5\pi}{3}$

13) $-\frac{11\pi}{10}$

14) $\frac{11\pi}{6}$

Use the given function value and the Fundamental identities, to find the indicated trigonometric function value.

15) $\tan \theta = \frac{1}{6}$ Find $\cot \theta$.

16) $\sin \theta = \frac{1}{7}$ Find $\csc \theta$.

17) $\sec \theta = 4$ Find $\cos \theta$.

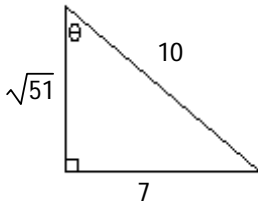
18) $\cot \theta = 4$ Find $\tan \theta$.

19) $\cos \theta = \frac{\sqrt{11}}{6}$ Find $\sec \theta$.

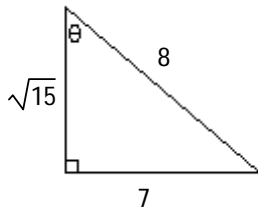
20) $\cot \theta = \frac{5}{6}$ Find $\tan \theta$.

Find the exact value of the indicated trigonometric function of the angle θ in the figure. Rationalize the denominator where necessary.

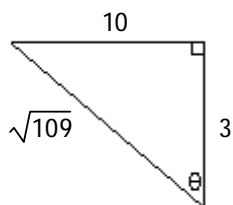
21) Find $\sin \theta$.



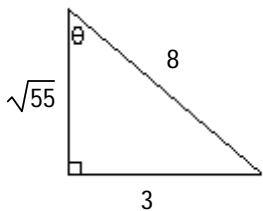
22) Find $\cos \theta$.



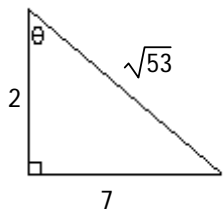
23) Find $\tan \theta$.



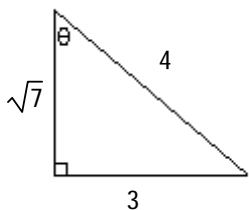
24) Find $\csc \theta$.



25) Find $\sec \theta$.



26) Find $\cot \theta$.



Use the given trigonometric function value of θ to find the requested trigonometric function value of the acute angle θ . Rationalize the denominator where necessary.

27) $\sin \theta = \frac{\sqrt{3}}{2}$ Find $\tan \theta$.

28) $\tan \theta = \sqrt{3}$ Find $\cos \theta$.

29) $\csc \theta = \frac{10}{3}$ Find $\cot \theta$.