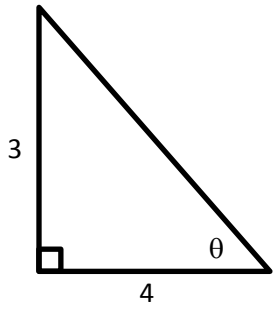
Trigonometry Review

1. For the following triangle, calculate the values of the six trigonometric functions for the given angle. (Leave your answer as a ratio)



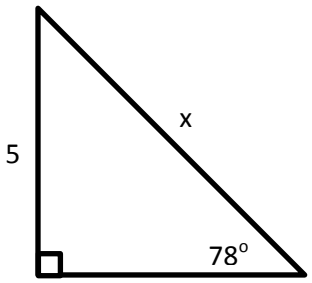
$sin\theta =$ ___ $csc\theta =$ ___

$cos\theta =$ ___ $sec\theta =$ ___

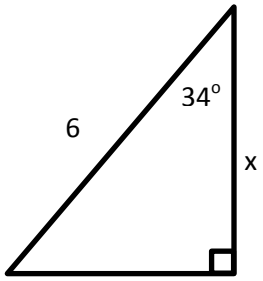
$tan\theta =$ ___ $cot\theta =$ ___

Solve for the missing variable:

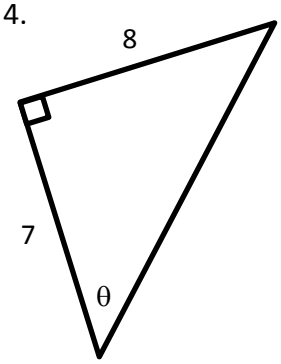
2.



3.



4.



Express in Radians: 5. 34^o 6. 200^o

Express in Degrees: 7. $\frac{\pi}{6}$ 8. $\frac{4\pi}{9}$

Evaluate

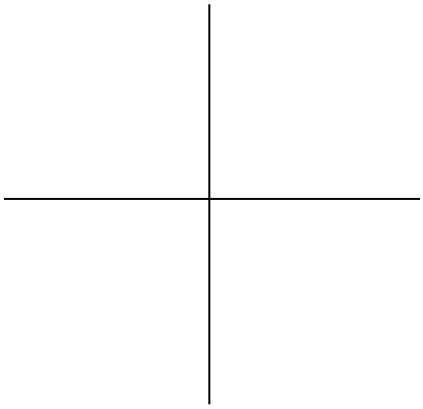
9. tan 2.3

10. sin 67.4^{o}

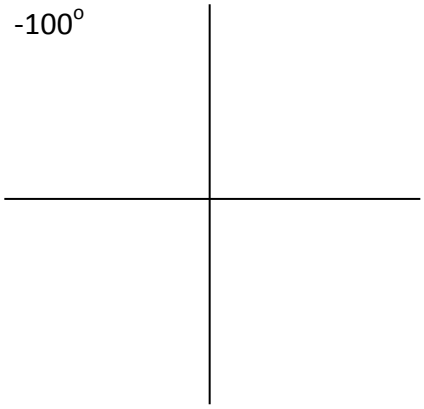
11. cot 15^{o}

Draw the following angles and state the reference angle:

12. 305^{o}

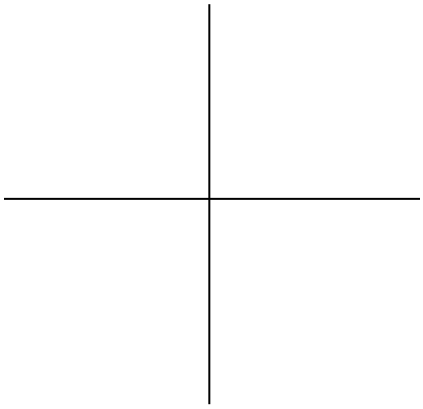


13. -100^{o}

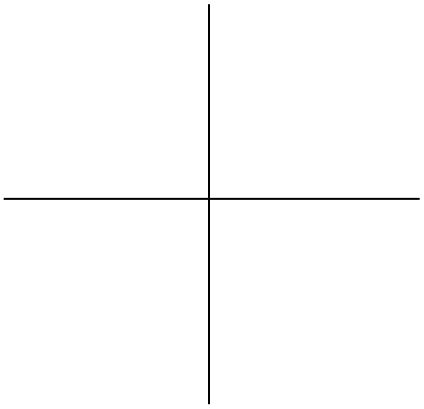


Draw a triangle that satisfies the given information and find the value of $cos\theta$:

14. $Quadrant = III, \quad sin\theta = \frac{-3}{6}$



15. $Quadrant = IV, \quad tan\theta = -\frac{4}{7}$



State the amplitude, period, midline and phase shift of the following graphs:

16. $y = 3sin2x$

17. $y = tanx - 3$