Unit 6 Review

Your test will cover all material from unit 6 and will be done without a calculator. This review will has some practice problems from many of the topics you learned in the last few weeks. Solutions with work for this review will be online at mskmath.com. To best prepare for your test, you should complete this review, look over your notes and homework from this unit, and look over or redo your online quiz. Focus on the section where you missed homework or quiz questions. You do NOT have to turn in this review. Good luck on your test tomorrow!

6.2-6.3 Trig Review (no calculator)

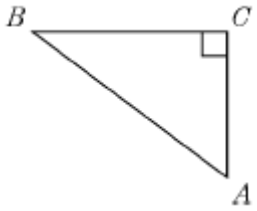
1. The terminal side of an angle θ passes through the point (-5, 12). Find the value of the six trig functions of θ.

2. $\sin\theta = -\frac{7}{8}$ and secθ > 0. Find the value of cotθ.

Find an expression to solve for each of the following (since it's no calculator, you don't need to actually solve it, just set it up):

3. a = 3, m<B = 37°. Solve for c

4. b = 12, c = 17. Solve for m<A



6.4-6.6 Degree and Radian Measurement

Find a coterminal angle for the given angle. Leave radian values in radians.

5. -227° 6. 470° 7. 15° 8. $\frac{\pi}{7}$ 9. $\frac{33\pi}{12}$ 11. $-\frac{14\pi}{5}$

Sketch the terminal side of the angle in the correct quadrant and determine the reference angle

12. 580° 13. -264° 14. 140° 15. $\frac{11\pi}{7}$ 16. $\frac{31\pi}{12}$ 17. $-\frac{13\pi}{5}$

Covert degree values to radians and radian values to degrees

18. 5° 19. -120° 20. 225° 21. $\frac{5\pi}{3}$ 22. $\frac{\pi}{20}$ 23. $\frac{3\pi}{4}$

6.7-6.9 Exact values and the unit circle

Understand the basic principles of the unit circle:

24. Which coordinate on the unit circle corresponds to sin θ? cos θ? tan θ?

25. What radian value is associated with coordinates $\left(\frac{1}{\sqrt{2}}, -\frac{1}{\sqrt{2}}\right)$?

26. If sin θ > 0, then θ lies in quadrant(s)____

27. If sec θ < 0 and tan θ > 0, then θ lies in quadrant(s) _____

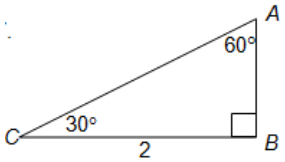
Find the exact value of the following:

28. $\cos -\frac{\pi}{6}$ 29. $\cot -\frac{2\pi}{3}$ 30. $\sin \frac{3\pi}{4}$ 31. $\cos 2\pi$ 32. $\cot \frac{3\pi}{2}$ 33. $\sec \frac{3\pi}{2}$

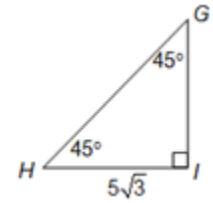
34. $4\cos \frac{5\pi}{3} + \sin^2\left(-\frac{5\pi}{4}\right)$ 35. $5\cos 4\pi + 2\sin \frac{\pi}{2}$ 36. $\cos^2 \frac{3\pi}{4} - \sec^2 \frac{2\pi}{3} + \tan \pi$

37. $\frac{1}{2}\sin \frac{11\pi}{6} + \frac{3}{2}\cos \frac{5\pi}{3}$ 38. $2\sin \frac{4\pi}{3} + \sin \frac{7\pi}{6}$ 39. $2\csc \frac{3\pi}{2} + 3\sec(-\pi)$

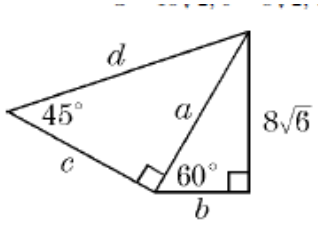
6.1 Special Right triangles



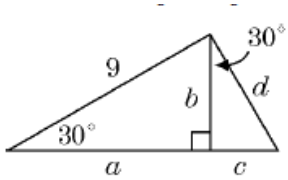
1. $AB =$ _____ $AC =$ _____



2. GH = _____



3. a = _____ b = _____ c = _____ d = _____



4. a = _____ b = _____ c = _____ d = _____