

Algebra/Geometry Review Week 3

Name _____

Due _____

Tchr _____ Blk _____

Welcome to trigonometry. Expect an Alg/Geo review sheet each week. The purpose of these assignments is to review topics from Alg II and Geometry, especially topics which may be used in our work in this class. Typically you'll receive a handout such as this the first time we meet during a particular week and it will be due the first time we meet the following week.

1. Solve $x^2 - 12x - 28 = 0$

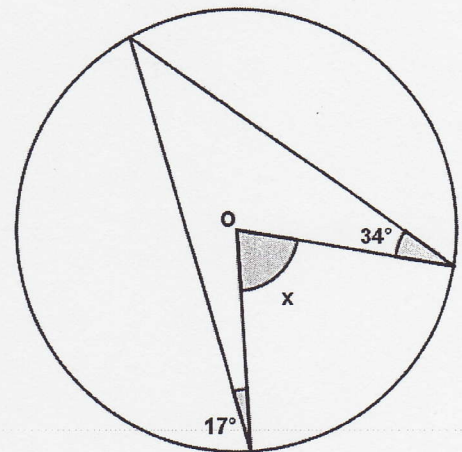
2. Solve $3x^2 - 17x + 10 = 0$

3. Simplify the rational expression [by the way, what is a "rational expression"?].: Hint, go find your Algebra II instructor and have them remind you how to factor a difference of cubes. Or perhaps go online. Or remember.

$$\frac{x^3 - 27}{x^3 + 3x^2 + 9x}$$

4. Add these fractions, remembering to find a common denominator. $\frac{2x}{3x-3} + \frac{2}{x+7}$

5. In the diagram at the right suppose point O is the center of the circle. Further, suppose the radius of the circle is 28 inches. Find all the missing angles, the lengths of all the segments, and the lengths of the various arcs.



6. Solve for x. $\log x + \log(x - 9) = \log 22$

7. Find the angle between the hands of a clock when the time is 3:50

8. Give the contrapositive of the conditional statement: "If I'm in Mr. Dilsaver's Trigonometry class then there is a smile on my face".