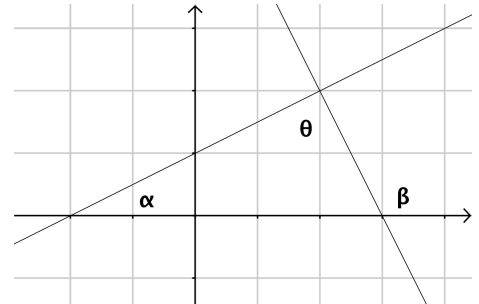


## Quiz Topics 10-1 to 10-3

1. Know the 11 formulas.
2. Be able to use them to solve problems without a calculator, eg.  $\cos(75^\circ) = \cos(30^\circ + 45^\circ)$ .
3. Be able to use the formulas “backwards and forwards”, eg.  $2\sin 15^\circ \cos 15^\circ = \sin 30^\circ = .5$ .
4. Review your identities from Chapter 8, such as  $\sin^2 x + \cos^2 x = 1$  and  $\sin(90^\circ - \theta) = \cos \theta$ , etc.

5. Given the equations of 2 lines, know how to find the angle,  $\theta$ , between them using their angles of inclination:



6. Remember that when it says  $\tan A = \frac{1}{2}$ , that  $\frac{1}{2}$  is not the angle. I saw some notation mistakes on people's work.
7. If you're stuck, DRAW THE TRIANGLE.
8. Remember that arctan or  $\tan^{-1}$  is an angle. For example,  $\sin\left(\tan^{-1}\frac{2}{3} + \tan^{-1}\frac{1}{2}\right)$  is just  $\sin(\alpha + \beta)$ . Draw the triangles and use the formulas.
9. When proving identities, the same hints apply: put things in terms of sine and cosine, use identities to substitute and get common denominators. ALSO, keep checking the other side to know where you're going. If the left side has  $\sin(4x)$  and the other side only has trig functions in terms of  $x$ , you're going to have to use double angle formulas to break that angle down.
10. As always, redo “homework” (classwork) problems that were tough. Make sure you've tried ALL the problems, even the stretch ones.
11. Know how to keep adding the period to get ALL of the solutions to a trig equation. This will keep coming up.