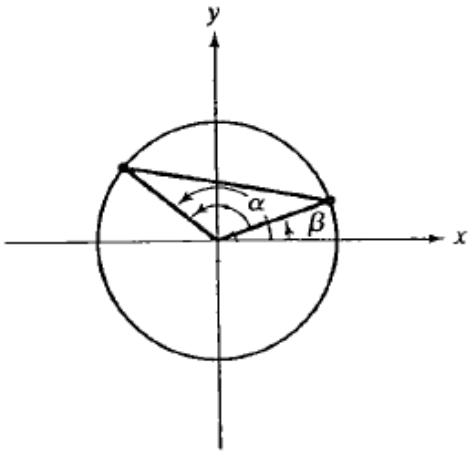
Name:_____

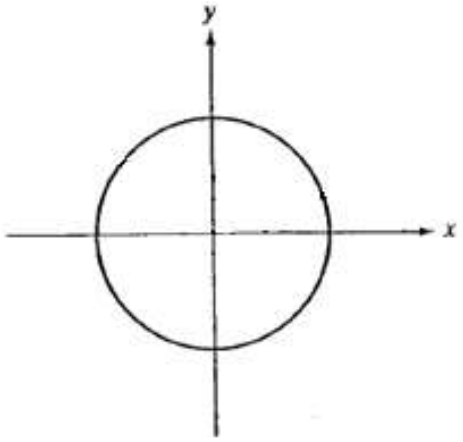
Mathematics 1613: Trigonometry Quiz #11

32: Does $\cos(\alpha - \beta) = \cos\alpha - \cos\beta$? Give an example to support your assertion.

33: Label the coordinates in the following diagram. What is the angle between α and β?



34: Rotate the angle $\alpha - \beta$ so that it is in standard position, and label its new coordinates. Despite its new coordinates, did this rotation change the length of the line segment? Why or why not?



Name:_____

35: Find two different expressions for the length of the line segment above. Simplify each one as much as possible, explaining your steps.

36: Use the two expressions to find a trigonometric angle subtraction formula. Explain your reasoning.