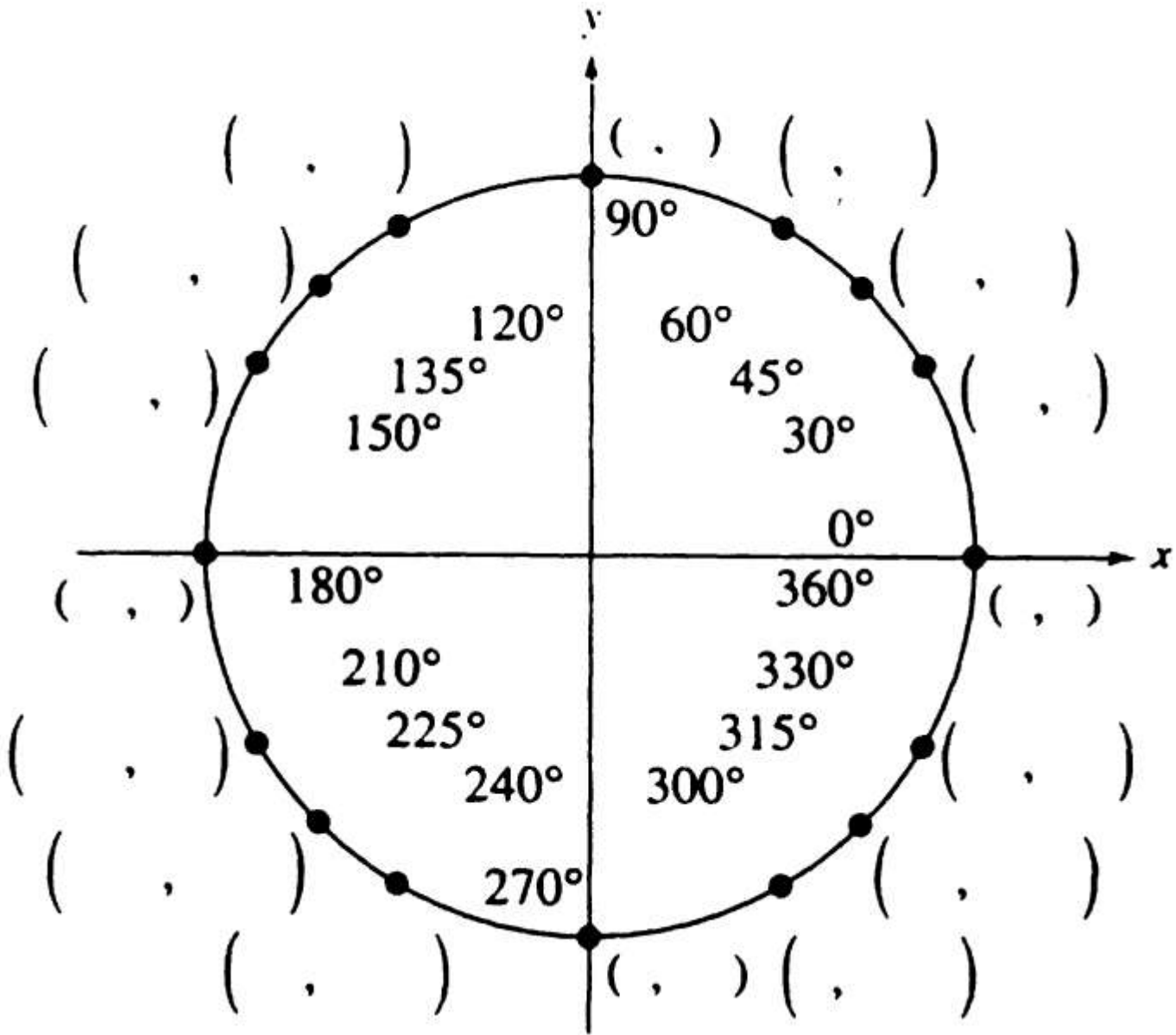


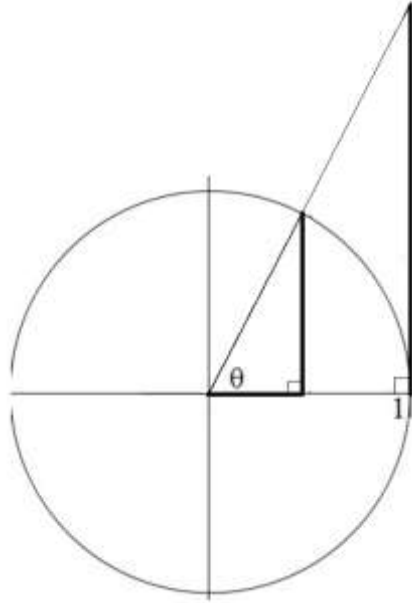
Mathematics 1613: Trigonometry Quiz #3

Problem 8: Complete the unit circle:

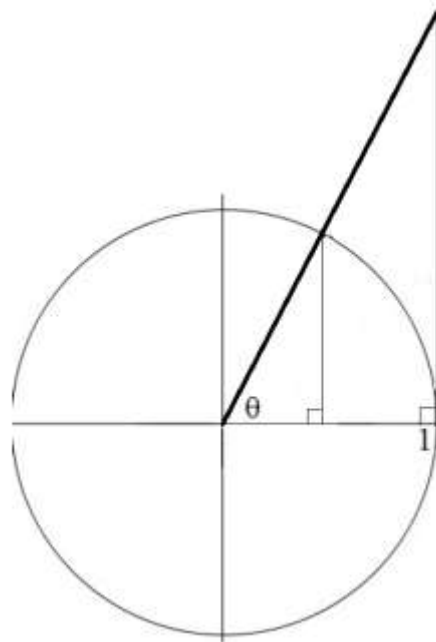


Name: _____

Problem 9: Find an expression for the indicated (bolded) lengths. Justify and explain all of your steps!



Problem 10: Using a similar technique, find an expression in terms of sine and cosine for the indicated length:



Problem 11: Using the diagram(s) above, derive the identity $1 + \tan^2 \theta = \sec^2 \theta$ (that is, explain how we know that this identity is true).