

APPM 1350

Name: _____

Fall 2021

Quiz 5

10/05/2021

Time Limit: 10 Minutes

Recitation Section: _____

1. (10 points) You're burning a log (idealized as a cylinder) on the fire. The fire evenly consumes the log such that the radius decreases by 3 inches every hour. Supposing that the log initially has a radius of 6 inches, how fast is the cross-sectional area of the log decreasing after the log has been on the fire for **40 minutes**? Show all work.