

MATH 131, Fall 2019

Name: _____

Quiz 6

10/24/19

Section: _____

For full credit you must present a clearly organized solution, showing all supporting calculations. Include units in your final answer and leave it in exact form (you do not need to calculate a decimal approximation).

1. You are making pancakes, ladling batter onto a hot griddle. As you ladle batter to make a pancake, the batter forms a disk, which you may model as a stout circular cylinder whose diameter remains 12 times its height as the disk expands. How fast is the radius of the pancake growing when the diameter is 4 inches if you are ladling 2 cubic inches per second of batter onto the griddle?