

MATH 251 (PHILLIPS) QUIZ 2, 11:00 am F 21 February 2025. 20 minutes; 20 points.

NAME: _____

Student id: _____

Standard exam instructions apply. In particular, no calculators, no communication devices, and no notes except as 3×5 file card, written on both sides. Also, all notation must be correct, with “=”, “lim”, etc. everywhere they are supposed to be, and nowhere they are not supposed to be. Write answers on this page. Use the back if necessary.

(20 points) You are cooking a circular pancake. At 3 seconds after you started to pour the batter into the pan, the radius of the pancake was 4 centimeters, and was increasing at 2 centimeters per second. At that time, was its area increasing or decreasing? At what rate? (Be sure to include the correct units in your answer.)