

Math 1A: Quiz 14  
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Name: \_\_\_\_\_  
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You must always justify your answers. This means: show your work, show it neatly, and when in doubt, use words (and pictures!) to explain your reasoning. No justification = no points.

1. (10 pts) Graph the curves  $y = 1/(1+x)$ ,  $y = \sqrt{2x+1}$ , and  $x = 3$ . Find the enclosed area.

2. (bonus) On the back of this page, sketch the curve  $y^2 = x(x+1)(x+2)$  and write an expression for the area of the closed loop. You do not need to evaluate the expression.