

Math 274
19 July 2017

Quiz 12a
Show Appropriate Work

Name: _____
Point Values in boxes.

1. All the points!¹

Complete the square to rewrite

$$s^2 + 3s + 5$$

in the form

$$(s - a)^2 + b^2.$$

[NOTE: expect some abnormally ugly arithmetic.]

$$\begin{aligned} s^2 + 3s + 5 &= s^2 + 3s + \frac{9}{4} + 5 - \frac{9}{4} \\ &= \left(s + \frac{3}{2}\right)^2 + \left(\frac{11}{2}\right)^2 \end{aligned}$$

$\frac{20}{4} - \frac{9}{4}$

¹Actually, it is worth no points. However, if you demonstrate that you cannot complete the square, an unhappy face will be marked down next to your name in my gradebook. An unhappy face means nothing unless you are in a position where I need to decide whether I should round up or down when deciding final grades.