

Name _____

Rhino Bonus (+1) added to your Top Four Quiz Total.

If you stayed the whole class meeting on 3.13.23, you are entitled to this bonus opportunity, due on Pi Day, 3.14.23.

Find the **exact value** of the arc length for your polar spiral on Question 2 of your quiz by using the Fundamental

Theorem of Calculus. You must evaluate $\int_0^{14} \sqrt{r^2 + \left(\frac{dr}{d\theta}\right)^2} d\theta$ exactly. Your answer contains a radical.