

Name:
J#:
Date: 2017 July 07

Exercise Type (Cost):
In-Class (1AP)

Standard: This student is able to...	Mark:
C07: WashShell. Use the washer or cylindrical shell method to express a volume of revolution as a definite integral.	
Extra2	★ reattempt due on:

Find a definite integral equal to the volume of the solid obtained by rotating the region bounded by $y = x$, $y = 2x$, $x = 3$ around the axis $x = -1$.

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Standard: This student is able to...	Mark:
C10: Polar. Convert and sketch polar and Cartesian coordinates and equations.	
4/4	★ reattempt due on:

Draw the circle centered at the origin with radius 2, along with the line segments from $(0, 0)$ to $(0, 2)$ and from $(0, 0)$ to $(\sqrt{2}, \sqrt{2})$. Then describe the smaller region bounded by the circle and between these line segments using polar coordinates.

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Standard: This student is able to...	Mark:
S09: PolarAppl. Use polar coordinates to express an ar-length or area as a definite integral.	
3/3	★ reattempt due on:

The area bounded by an outside curve with polar equation $r = R(\theta)$ and inside curve with polar equation $r = r(\theta)$ where $\alpha \leq \theta \leq \beta$ is given by $\frac{1}{2} \int_{\alpha}^{\beta} ((R(\theta))^2 - (r(\theta))^2) d\theta$. Give a definite integral equal to the area inside the circle $x^2 + y^2 = 2$ and to the left of the line $x = -1$.

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Standard: This student is able to... S10: SeqForm. Define and use explicit and recursive formulas for sequences.	Mark:
2/3	★ reattempt due on:

Find an explicit formula a_n for the sequence $\langle 1, \frac{3}{2}, \frac{5}{4}, \frac{7}{8}, \frac{9}{16}, \frac{11}{32}, \dots \rangle$. Then write the sequence in $\langle a_n \rangle_{n=N}^{\infty}$ form (where N is your starting index).

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In-Class (1AP)

Standard: This student is able to... C11: SeqLim. Compute the limit of a convergent sequence.	Mark:
1/4 <div>★ reattempt due on:</div>	

Use factoring to find $\lim_{k \rightarrow \infty} \frac{k^3 - 2k^2 + 7}{1 + k^4}$.