

Problem Set 71

2. $\frac{13}{3}$ joules

4. 2π units³

6a. $2xe^{-x^2}$

b. $\sqrt{\frac{2}{e}}$ units²

8. 4π

10a. 0

b. graphing calculator graph

c. 0

12. $\frac{1}{4}e^{2x}(2x-1) + C$

14. $x^2\left(\ln x - \frac{1}{2}\right) + C$

16. origin symmetry

18. $\frac{-4}{x\sqrt{x^2-16}}$

20. $\frac{1}{3}e^{x^3} + C$

22. C

24. A