

Problem Set 94 — Even Answers

2. 714.218 liters

4. 60 gallons

6. $V \approx 459.581 \text{ in}^3$

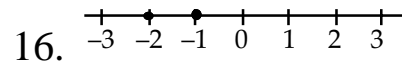
8. $\begin{bmatrix} 16 & -24 \\ -8 & 20 \end{bmatrix}$

10. $\begin{bmatrix} 32 & -78 \\ -20 & 61 \end{bmatrix}$

12. $\left(\frac{1}{5} + \frac{2\sqrt{19}}{5}, -\frac{2}{5} + \frac{\sqrt{19}}{5} \right)$

$\left(\frac{1}{5} - \frac{2\sqrt{19}}{5}, -\frac{2}{5} - \frac{\sqrt{19}}{5} \right)$

14. $(-4.628, 2.675)$
 $(-8.127, -9.143)$



18.

s	V
1	1
1.5	3.375
2	8
2.5	15.625
3	27
3.5	42.875

20. $V = 343 \text{ cm}^3$
 $s = \sqrt[3]{288} \approx 6.604 \text{ cm}$

22. $x = 7$

24. $x = \frac{23}{4}$

26. $\frac{3x^3 + 8x^2 + 6x + 1}{x(3x + 2)(x - 3)}$

28. $f(-3) = 31$
 $f(x+h) = 2x^2 + 4xh + 2h^2 - 3x - 3h + 4$

30. -23