

Problem Set 87 — Even Answers

2. 12,000 attended

4. 900 liters

6. $\frac{10(1000)}{60(2.54)^3} \approx 10.171 \text{ in}^3 / \text{min}$

8a. $x = 4$

b. $x = 1$

c. $n = 1$

10a. 10 times stronger

b. 100 times stronger

c. 1000 times stronger

12a. 0.032

b. 1.122×10^{-9}

14. $Y = -48.148 B + 4846.790$

16. $\approx 4.823i - 6.359j$

$\approx 7.981 \angle -52.819^\circ$

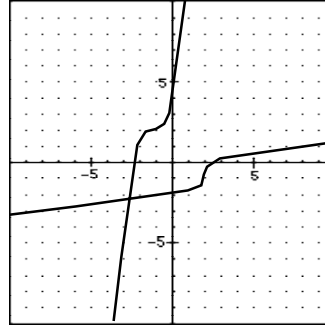
18. $\frac{2x^2 + 15x + 2}{(x + 5)(x - 2)}$

20a. 79,833,600

b. 220

c. 120

22. $f^{-1}(x) = \sqrt[3]{x - 2} - 1$



24. $d = -44$: 2 complex solutions

$$x = -\frac{1}{3} \pm \frac{\sqrt{11}}{3}i$$

26. $x = \frac{29}{2}$

28. $-\frac{3}{2} - \frac{7}{2}i$

30. $\frac{1}{3}$