

Problem Set 33 — Even Answers

2. 10 boys, 26 girls

4. 1800 g

6a. $x^4 - 2x^3 - 6x + 12$

b. $x^2 + 2x + 4 + \frac{2}{x-2}$

8. $V = (1632 + 54\pi) \text{ cm}^3$
 $\approx 1801.646 \text{ cm}^3$

10. $a^2px^3(1 - 4a - x)$

12. $-2x(x - 5)(x - 3)$

14. $y = \frac{8}{3}x + 5$

16. The graph of $g(x)$ is the same as the graph of $f(x)$ except it has been moved down 6 units.

18. $A = \sqrt{65}, \quad B = \frac{5\sqrt{65}}{7}$

$$C = \frac{48}{7}$$

20. $h = \frac{2\pi}{3} \text{ cm} \approx 2.094 \text{ cm}$

22. $\frac{5x + 2p}{x(x + p)}$

24. $x = -\frac{46}{5}$

26. $a + 2$

28. $22\sqrt{5}$

30. -55