

## College Algebra Even Answers

**PS 30:** 2. 14, 41      4. 422.86 ml      6.  $6.5813/-156.9343$       8. proof      10. 21  
 12. 3      14. graph      16. (a)  $\{x \in \mathfrak{R} \mid x \neq 0\}$       (b)  $\left\{x \in \mathfrak{R} \mid x > -\frac{7}{2}\right\}$       (c)  $\{x \in \mathfrak{R} \mid x \geq 3\}$       18.  $-\frac{3}{2}$   
 20. (a) x (b) x      22.  $x^a + y^b$       24.  $\frac{kxd + kc}{axd + ac + bd}$       26.  $x^2 + 2xh + h^2 - x - h$       28.  $2304 \text{ cm}^2$       30. C

**PS 31:** 2. Lannes = 20 yr, Davout = 40 yr      4. B = 12, G = 6, R = 4      6. (a) x axis – no, y axis – yes, origin – no, (b) x axis – yes, y axis – yes, origin – yes,      8. graph      10. proof      12. 2      14.  $\frac{1}{27}$   
 16. (a) function, not 1 to 1 (b) function, not 1 to 1 (c) not a function (d) function, 1 to 1      18. 0  
 20. (a) -1 (b) -1 (c) 0; 22.  $7a^{5n+2}(7 - a^{n+1})$       24.  $\frac{y^3 + x^3}{xy^3}$       26.  $\frac{6 - yr}{5y - 3p}$       28.  $2xh + h^2$       30. B

**PS 32:** 2. 84 min      4. 22 ft      6.  $y = \frac{1}{3}x - \frac{4}{3}$       8. (a) x axis – yes, y axis – no, origin – no  
 (b) x axis – no, y axis – yes, origin – no      10. graph      12. proof      14. -4      16. graph  
 18.  $\{x \in \mathfrak{R} \mid x \geq 0, x \neq 1\}$       20. -1      22.  $(0, 2), \left(\frac{3}{2}, -\frac{5}{2}\right)$       24.  $\frac{-2}{17} + \frac{25}{17}i$   
 26.  $\frac{1}{6} \pm \frac{\sqrt{5}i}{6}$       28.  $600\pi \text{ m}^2$       30. A

**PS 33:** 2. 375 lb      4. C      6.  $y = -\frac{1}{4}x + \frac{7}{4}$       8. (a) x axis – no, y axis – no, origin – yes  
 (b) x axis – yes, y axis – yes, origin – yes      10. graph      12. 495      14. -6      16. graph  
 18.  $\{x \in \mathfrak{R} \mid x \geq 2, x \leq -2, x \neq 3\}$       20. (a) 80 (b) 9 (c) 4      22.  $4a^{x+2}(1 - 3a)$       24.  $-\frac{5}{4} + \frac{1}{4}i$   
 26.  $h^2 + 2h + 2xh$       28.  $x = 115, y = 41, z = 89$       30. B

**PS 34:** 2.  $\frac{21}{10} \text{ hr}$       4. \$135      6. -5      8.  $H = 6.667C - 580$       10. A      12.  $y = 3x + \frac{5}{2}$   
 14. x axis – yes, y axis – yes, origin – yes      16. graph      18. 5      20. 25      22.  $\{x \in \mathfrak{R} \mid x \geq -11, x \neq 4, -3\}$   
 24. (a) 8 (b) 8 (c) 19      26.  $\frac{-h}{x^2 + hx}$       28.  $144\sqrt{3} \text{ cm}^2$       30. C