COLLEGE ALGEBRA EVEN ANSWERS

PS 1: 2. 10° 4. 1775 grams; 6. $\frac{x^4y^2}{8}$ 8. $7y-2xy^3$ 10. 13

12. $\frac{x^2+2x+2}{x^2+x}$ 14. N = 10 , D= 40 16. N = 15, D = 8 18. An acute angle is an angle whose measure is greater than 0° and less than 90°. 20. A = 120, B = 30, C = 40 22. 6

24. $4\sqrt{3}\ in^2$ 26. $3\pi\ m^2$ 28. $(208-52\pi)\approx 44.637\ m^2$ 30. B

PS 2: 2. 40° 4. 2091 6. $\frac{5a^7}{b^4}$ 8. $6r^2s-5rs^2$ 10. $\frac{5}{3}$

12. $3x^2+x^2y-5xy^2+2y^3$ 14. $N_W=5\ \ N_G=1$ 16. A triangle which has sides all of different length.

18. x = 120, y = 60, z = 60 20. 21 22. $4\sqrt{3}\,m$ 24. $V_{cylinder}=128\pi m^3\approx 402.12\,m^3$

26. 2 cm. 28. $V_{cyl}=\left(\frac{1980+1125\pi}{2}\right)\approx 2757.146\ cm^3$ 30. C

PS 3: 2. 259 4. $N_N=21; N_D=8$ 6. Right to left: SF = 2, Left to right: SF = .5, x = 8, y = 3.5; 8. x=9, y=$\frac{63}{5}$, z=$\frac{84}{5}$ 10. x = $\sqrt{70}$, y = $3\sqrt{14}$, z = $3\sqrt{5}$ 12. $\frac{6a^6}{b}$

14. $\frac{55}{36}$ 16. $\frac{6x^2-8x-2}{x(x-1)(x-2)}$ 18. $3+\frac{8}{x^2y^6z^4}$ 20. $\frac{15}{2}$ 22. $12\pi\,cm^2$

24. $4\pi\,in^2$ 26. 6.9 sq cm 28. 70 cubic meters 30. A

PS 4: 2. 1580; 4. D = 11, Q = 9 6. obtuse triangle; 8. & 10. Refer to Lesson 4;

12. x = 10, y = 5; 14. $-\frac{32}{7}$ 16. $\frac{3s}{t^3}-9s^7t$ 18. x = 9, y = $\frac{20}{3}$

20. a = $\frac{9}{2}$, b = $\frac{5}{2}$, c = 5 22. $\frac{35}{6}$ 24. $54\sqrt{3}\ m^2$ 26. V = $\frac{4000\pi}{3}\approx 4188.790\,m^3$,

Surface Area = $\left(100\pi+100\sqrt{2}\pi\right)\approx 758.448\ cm^2$ 28. $\frac{125}{3}\ cm^3$ 30. D

PS 5: 2. 812 grams; 4. acute triangle; 6. $\frac{4}{25}$ 8. $x^{\frac{37}{12}}y^{\frac{1}{2}}$ 10. $y^{\frac{a+2x+4}{2}}z^{\frac{4a-x}{3}}$

12. $3+2\sqrt{3}\sqrt{x}+x$ 14. $\frac{x^2+y^2}{xy}$ 16. $-9\sqrt{2}+2\sqrt{3}i$ 18. x = 5, y = 2

20. $\left(\frac{32\pi}{3}-16\right)\approx 17.510\,cm^2$ 22. 144 meters squared 24. Refer to Lesson 4

26. Refer to Lesson 4 28. $V=448\sqrt{3}\approx 775.959\ cm^3$, SA = $\left(96\sqrt{3}+48\sqrt{61}\right)\approx 541.169\ cm^2$

30. C