

## College Algebra Even Answers

**PS 77:** 2] 42.86 mph      4] \$1024      6]  $\frac{x+2}{x+1}$       8]  $21x^5y^2$   
 10] identity    12]  $x=4, y=5$     14]  $A = 30^\circ, a = 10$     16] 8.08%  
 18] P:  $y = -\frac{1}{12}(x-4)^2 + 3$ , D:  $y=6$ , AS:  $x=4$     20]  $y = -3 + 7 \sin \frac{2}{3}(x - 60^\circ)$   
 22]  $60^\circ, 120^\circ, 240^\circ, 300^\circ$     24] 1    26] Overlap shade inside both circles  
 28]  $\frac{17}{8}$     30]  $4x - 3 + 2h$

**PS 78:** 2] 62      4] 25Q-Ka cents      6] a: \$1000; B: \$2000  
 8] Hyperbola  $\frac{x^2}{9} - \frac{y^2}{4} = 1$  Curves Up/Down with Vertices at  $(0, \pm 3)$     10]  $15a^2b^4$   
 12] Identity    14] Side=5, Radius=8.09    16]  $A = 30^\circ, a=8.77, b=13.44$   
 18] 0 and  $\left(\frac{17}{2}\right)$     20] Curve through  $(1,0)$  and  $(10,-1)$     22]  $y = 5 + 4 \sin \frac{2}{3}\left(x - \frac{3\pi}{2}\right)$   
 24]  $\frac{\pi}{3}, \pi, \frac{5\pi}{3}$     26a]  $120^\circ$  b]  $-\frac{\pi}{3}$     28]  $\frac{13\sqrt{17}}{17}$     30]  $\frac{3\sqrt{5}}{5}$

**PS 81:** 2] 20      4]  $45^\circ; 55^\circ; 80^\circ$       6]  $B = 91.47^\circ, C = 48.53^\circ, a=5.14$   
 8] 69 ft.    10] Identity    12]  $2\text{cis}15^\circ; 2\text{cis}135^\circ; 2\text{cis}225^\circ$   
 14] Hyperbola  $\frac{x^2}{25} - \frac{y^2}{4} = 1$  Curves L/R with Vertices at  $(\pm 5, 0)$  ASYM:  $y = \pm \frac{2}{5}x$   
 16]  $35x^4y^3$     18]  $\frac{x^2}{25} + \frac{y^2}{4} = 1$     Ellipse with vertices at  $(0, \pm 2)$  and  $(\pm 5, 0)$   
 20] D:  $y = 6$ , AS:  $x = 4$ , P:  $y = -\frac{1}{16}(x-4)^2 + 2$     22]  $y = 10 + 2 \sin \frac{9}{8}(\theta - 90^\circ)$   
 24]  $50^\circ, 110^\circ, 170^\circ, 230^\circ, 290^\circ, 350^\circ$     26]  $\frac{3}{5}$     28]  $\frac{10}{11}$     30]  $\frac{1}{4}$

**PS 82:** 2] 22, 33, 44      4] (t-rh) miles    6]  $\frac{39b}{ab+9}$  days    8] -0.75  
 10]  $A = 51.32^\circ, B = 110.49^\circ, C = 18.19^\circ$     12] identity    14]  $1\text{cis}0^\circ$   
 16]  $\frac{1 \pm \sqrt{3}i}{2}; -1$     18]  $p^5 + 5p^4q + 10p^3q^2 + 10p^2q^3 + 5pq^4 + q^5$   
 20] Circum Rad=6.74, Inscib Rad= 6.57    22] D:  $y=-6$ , AS:  $x = 0$ , P:  $y = \frac{1}{24}x^2$

24]  $y = 2 + 9 \sin 4\left(x - \frac{\pi}{8}\right)$

26]  $\frac{\pi}{4}, \frac{3\pi}{4}, \frac{5\pi}{4}, \frac{7\pi}{4}$

28]  $\frac{2\sqrt{5}}{5}$

30] 51.38%

**PS 83:**

2] \$130

4]  $\frac{1}{6}$

6]  $\frac{15}{68}$

8] -1.95

10]  $A = 44.42^\circ, B = 101.54^\circ, C = 34.05^\circ$

12] identity

14] -32i

16] 1; I; -1; -i

18]  $20x^3z^3$

20] Area= 716.55 sq. cm. ; radius = 14.93 cm.

22]  $y = -8 + 6 \cos \frac{9}{2}(x - 30^\circ)$

24]  $15^\circ, 75^\circ, 195^\circ, 255^\circ$

26] Final Solution Shade is inside Parabola and outside circle.

28]  $\frac{2}{3}$

30]  $(x - 3\sqrt{3}i)(x + 3\sqrt{3}i)$