

College Alg Even Answers

PS 11: 2] $N_B = 135, N_S = 45$ 4] Invalid 6] 5 8] $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
10] $\frac{4}{3}, -1$ 12] $-\frac{9}{17} + \frac{2}{17}i$ 14] $-\frac{1}{4} \pm \frac{\sqrt{39}}{4}i$ 16] $x = 2, y = 4, z = 1$ 18] -1
20] $\triangle PQR \cong \triangle PSR$ by HL 22] $\frac{26}{3}$ 24] $x = \frac{13}{4}; y = \frac{39}{4}$ 26] $\frac{b^5 + a^7 b^2}{a^{11}}$
28] $36x^3 - 4y$ 30] C

PS 12: 2] $N_B = 14, N_G = 38$ 4] Interior = 720° and Exterior = 360°
6] $x = 4, y = \frac{4}{3}$ 8] 36 10] $\frac{1}{4} \pm \frac{\sqrt{39}}{4}i$ 12] $y = 2x - 1$ 14] $\frac{8 - 5\sqrt{2}}{4}$
16] $1 \pm \frac{3\sqrt{2}}{2}$ 18] 4 20] $-\frac{1}{2} - 2i$ 22] a) SAS b) HL c) SSS d) AAS
24] $\triangle ABE \cong \triangle CBD$ by SAS 26] $\frac{20}{3}$ 28] $\frac{215\pi}{6} \text{ cm}^3$ 30] D

PS 13: 2] 2394 4] 50 6] $\frac{27}{5}$ 8] 35 10] Valid
12] $x = 95; y = 120; z = 115$ 14] $\frac{1 \pm 2i}{5}$ 16] $\frac{3 \pm \sqrt{17}}{2}$ 18] $x = 5, y = 2, z = -1$
20] 1 22] $-9 + 4\sqrt{5}$ 24] $\triangle ABD \cong \triangle CBD$ by SAS 26] $\frac{9}{2}$
28] $144 + 129\pi \approx 172.274 \text{ m}^3$ 30] A

PS 14: 2] -11, -9, -7 4] 10, 650.272 feet 6] $7.688 \angle 108.27^\circ, 7.688 \angle -251.73^\circ,$
 $-7.688 \angle 288.27^\circ, -7.688 \angle -71.73^\circ$ 8] $-5.926\hat{i} - 4.465\hat{j}$ 10] $x = 140, y = 80, z = 140$
12] $\frac{59}{5}$ 14] $\frac{7}{4}, -1$ 16] $\frac{-1 \pm \sqrt{31}}{5}$ 18] $(3\sqrt{3} + 2\sqrt{2} - 12)i$ 20] $\frac{1 - 7i}{10}$
22] $\triangle ABC \cong \triangle CDE$ by AAS 24] $4x^{\frac{2}{3}} - 16y^{\frac{2}{5}}$ 26] $\frac{9}{4}$ 28] 200 cm^3 30] B

PS 15: 2] 1080 4] 5847.609 feet 6] Step 1 and 2: Given, Step 3: AC=AC by Reflexive,
Step 4: $\triangle ABC \cong \triangle ADC$ by SSS
8] $5.161 \angle 324.462^\circ, 5.161 \angle -35.538^\circ, -5.161 \angle 144.462^\circ, -5.161 \angle -215.538^\circ$ 10] $31.212\hat{i} - 28.103\hat{j}$
12] 21 14] $\frac{-3 \pm 3i}{2}$ 16] Line A: $y = 3$; Line B: $y = \frac{3}{2}x - 9$ 18] $-6i$
20] $\frac{1}{xy(3x - 2y)}$ 22] $a^{-2z-5}b^{2z+11}$ 24] $x = 2, y = 4, z = 6$ 26] $\frac{21}{2}$
28] $l = 5 \text{ m}, h = 3 \text{ m}$ 30] D