Comprehensive Review #9

Topics:
Lesson 72 - Law of sines
Lesson 87 - Sum and differene identities
Lesson 90 - Double-angle identities
Lesson 96 - Tirangle area formula

[1] $C = 77°,\ a = 61.85,\ c = 76.48$

[2] $C = 84°,\ a = 65.23,\ c = 93.39$

[3] [A]

[4] [B]

[5] $\sin(\theta - 2\pi) = \sin\theta\ \cos2\pi - \cos\theta\ \sin2\pi = \sin\theta \cdot (1) - \cos\theta \cdot (0) = \sin\theta$

[6] $\cos 2A = \cos(A + A) = \cos A \cos A - \sin A \sin A =$
$\cos^2 A - \sin^2 A$

[7] $-\cos\theta$

[8] [B]

[9] [A]

[10] $\dfrac{\pi}{6},\ \dfrac{\pi}{2},\ \dfrac{5\pi}{6},\ \dfrac{3\pi}{2}$

[11] $\dfrac{\pi}{3},\ \dfrac{2\pi}{3},\ \dfrac{4\pi}{3},\ \dfrac{5\pi}{3}$

[12] $(\cos x + \sin x)^2 - 1 = \cos^2 x + 2\sin x \cos x + \sin^2 x - 1 = 2\sin x \cos x = \sin 2x$

[13] [A]

[14] [A]

[15] [B]

[16] [B]