

CH. 10 SOLUTIONS

Sect 10.1 p. 373

(28) $\frac{3-4\sqrt{3}}{10}$

(30) $-\frac{7\sqrt{2}}{10}$

(34) $\cot \alpha \cot \beta$

(36) $\cos(x+y)$

(38) 0

Sect 10.2 p. 377

(2) a.) 1 b.) 7

(4) $-\frac{\sqrt{3}}{3}$

(6) 1

(8) -2

(12) a) $2-\sqrt{3}$ b) $-2-\sqrt{3}$

(14) $\theta_1 = 70.6^\circ$, $\theta_2 = 109.4^\circ$

(24) $-\frac{7}{4}$

(26) a) -1 b) 0 c) \emptyset

Sect 10.3 p. 383

(2) $\sin \alpha$

(4) $\cos 40^\circ$

(6) $\cos 8A$

(8) $\cos 6\alpha$

(10) $\cos 80^\circ$

(12) $\cos 35^\circ$

(14) 1

(16) $-\frac{\sqrt{3}}{2}$

(18) $-\sqrt{3}$

Sect 10.4 p. 389

(12) $0 < x < \frac{\pi}{3}$, $\frac{\pi}{2} < x < \pi$, $\frac{3\pi}{2} < x < \frac{5\pi}{3}$

(18) 65° , 245°

(20) 49.1° , 229.1°

(22) 22.5° , 67.5° , 112.5° , 157.5° ,
 202.5° , 247.5° , 292.5° , 337.5°

(24) $\frac{\pi}{4}$, $\frac{5\pi}{12}$, $\frac{11\pi}{12}$, $\frac{13\pi}{12}$, $\frac{19\pi}{12}$, $\frac{7\pi}{4}$

(26) 0 , $\frac{\pi}{3}$, π , $\frac{4\pi}{3}$, $\frac{5\pi}{3}$, $\frac{2\pi}{3}$

(28) $\frac{3\pi}{4}$, $\frac{7\pi}{4}$

(30) $\frac{\pi}{2}$, $\frac{3\pi}{2}$, 1.19, 4.33

(32) $\frac{3\pi}{2}$