

- p. 366) #30-32, 36, 37, 40, 51-55

(30) $\frac{5\pi}{6}$

(31) $\frac{5\pi}{6}$

(32) $\frac{5\pi}{4}$

(36) 1.14

(37) 5.25

(40) .29 or 3.43

(51) false: $\tan x$ is not fully defined over $(-\infty, \infty)$

(52) true: $\frac{1}{\cos a} = \text{und} \Rightarrow \cos a = 0$
 $\cot a = \frac{\cos a}{\sin a} = \frac{0}{\sin a} = 0$

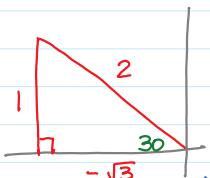
(53) a

(54) e

(55) d

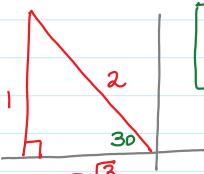
Solutions

(30)



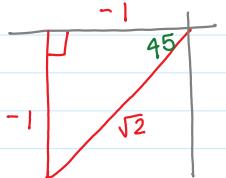
$$180 - 30 = 150^\circ \text{ or } \frac{5\pi}{6}$$

(31)



$$150^\circ \text{ or } \frac{5\pi}{6}$$

(32)



$$180 + 45 = 225^\circ \text{ or } \frac{5\pi}{4}$$

(36)

$$\frac{1}{\cos x} = \frac{2.4}{1} \Rightarrow \cos x = \frac{1}{2.4}$$

$$x = \cos^{-1}\left(\frac{1}{2.4}\right)$$

$$x \approx 1.14$$

(37)

$$\frac{1}{\tan x} = \frac{-0.6}{1} \Rightarrow \tan x = \frac{1}{-0.6}$$

$$x = \tan^{-1}(-0.6)$$

$$x = -1.03$$

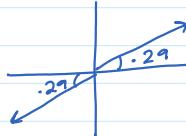
$$2\pi - 1.03 = 5.25$$

(40)

$$\tan x = 0.3$$

$$x = \tan^{-1}(0.3)$$

$$x \approx 0.29 \text{ & } 3.43$$



$$\pi + 0.29 = 3.43$$