College Algebra

Chapter 6: Intro to solving equations

Name: Key

Date: _____ Period: _____

Find x over the interval of $[0^\circ, 360^\circ)$. If necessary, round to the hundredths.

1.) $\cos x = -\frac{1}{3}$

RA: 70.53°

Q2: $x = 109.47^\circ$

Q3: $x = 250.53^\circ$

2.) $\sec x = \pm\frac{3}{2}$ = $\cos x = \pm 2/3$

RA = 48.19°

Q1: $x = 48.19^\circ$

Q2: $x = 131.81^\circ$

Q3: $x = 228.19^\circ$

Q4: $x = 311.81^\circ$

3.) $\csc x = -6$ = $\sin x = -\frac{1}{6}$

Q3: $x = 189.59^\circ$

Q4: $x = 350.41^\circ$

4.) $\tan x = -2$

RA: 63.43°

Q2: $x = 116.37^\circ$

Q4: $x = 298.57^\circ$

5.) $\sin x = 3$

RA: error

no solution

6.) $\cot x = \frac{2}{7}$ = $\tan x = 7/2$

RA: 74.05°

Q1: $x = 74.05^\circ$

Q2: $x = 254.05^\circ$

Find x over the interval of $[0,2\pi)$. If necessary, round to the hundredths.

7.) $\tan x = 5$

RA: 1.37

Q1 X = 1.37

Q3 X = 1.77

8.) $\sec x = -\frac{15}{2}$ = COSX = $-2/15$

RA: 1.44

Q2: X = 1.70

Q3: X = 4.58

9.) $\sin x = \pm\frac{3}{5}$

RA: .64

Q1 X = .64

Q2 X = 2.50

Q3 X = 3.78

Q4 X = 5.64

10.) $\cot x = -\frac{18}{5}$ tanX = $\frac{-5}{18}$

RA: .27

Q2 X = 2.87

Q4: X = 6.01

11.) $\csc x = \frac{7}{5}$ = SinX = $5/7$

RA: .795
= .80

Q1 X = .80

Q2 X = 2.34

12.) $\cos x = \frac{2}{5}$

RA: 1.16

Q1 X = 1.16

Q4 X = 5.12