**Chapter 4 Review**

**Section 4.1**

1 Draw each angle in standard position. Change each degree measure to radians and each radian measure to degrees.

a) 30˚ b) $\frac{4π}{3}$ radians

2 Determine the quadrant the terminal arm lies. Identify one positive and one negative angle that is coterminal with each angle.

a) 181˚ b) -405˚ c) $\frac{16π}{3}$

3 Express the angles coterminal with 100˚ in general form. Identify the angles coterminal with 100˚ that satisfy the domain -720˚≤ θ ≤ 720˚.

4 Express the angles coterminal with $\frac{11π}{5}$ in general form. Identify the angles coterminal with $\frac{11π}{5}$ in the domain -4π≤ θ ≤ 4π.

5 Find the arc length subtended by an angle of $\frac{13π}{6}$ radians, if the radius is equal to 16 cm.

**Section 4.2**

1 Indicate all the multiples of $\frac{π}{3}$ for 0 $\leq θ \leq 2π$

2 Indicate all the multiples of $\frac{π}{2}$ for 0 $\leq θ \leq 2π$

3 Indicate all the multiples of 300 for 00 $\leq θ \leq 360$0

4 Indicate all the multiples of 450 for 00 $\leq θ \leq 360$0

**Section 4.3**

1 Determine the exact values of the six trigonometric ratios for 225$°.$

2 Determine the approximate values of the six trigonometric ratios for 116$° $to the nearest thousandth. (Calculator)

3.P(-3,7) is a terminal point of angle $θ$ in standard position. Determine the exact values of the six trigonometric ratios for $θ.$

4 Suppose csc $θ$ = 5. Determine the exact values of the other trigonometric ratios for 0$°$ $\leq θ \leq 180°$

**Section 4.4**

1 Solve each trigonometric equation in the specified domain.

1. 5 sin $θ$ + 2 = 1 + 3 sin $θ$, 0 $\leq θ <2π$
2. 3 csc $θ$ – 6 = 0, 0$° \leq x <360°$

2 Solve for $θ$. ta$n^{2} θ-5\tan(θ)+4=0$, 0 $\leq θ <2π$ (calculator). Round to the nearest hundredth.

3 Solve si$n^{2} θ-1=0$, 0 $\leq θ <2π$

4 If co$s^{2} θ-1=0, solve for θ in the domain $0$° \leq θ< 360°$.

Determine the general solution for co$s^{2} x-1=0$, where the domain is real numbers measured in degrees.