A1) Sketch the angle  $\theta = 230^{\circ}$  in standard position.

B1) Determine the measure of the angles that are coterminal with the angle  $\theta = 230^{\circ}$  in the domain  $-500 \le \theta \le 500$ . Write an expression for all angles that are coterminal with  $\theta$  (in the domain  $\theta \in \mathbb{Z}$ ).

C1) Determine the value of csc 425° to 3 decimal places.

A2) Sketch the angle  $\theta = -420^{\circ}$  in standard position.

B2) Determine the measure of the angles that are coterminal with the angle  $\theta = -420^{\circ}$  in the domain  $-800 \le \theta \le 800$ . Write an expression for all angles that are coterminal with  $\theta$  (in the domain  $\theta \in \mathbb{Z}$ ).

C2) Determine the value of  $\sec -140^\circ$  to 3 decimal places.

D1) Determine the exact value of sin 210°.

E1) If the terminal arm of  $\theta$  passes through point P(3, -2), determine the exact values of the six trig ratios.

F1) If  $\theta$  is in the 4<sup>th</sup> quadrant and  $\cos\theta = \frac{\sqrt{11}}{6}$ , determine the exact value of  $\sin\theta$ .

G1) Given the information in question F1 above, determine all possible values of  $\theta$  in the domain -360°  $\leq \theta \leq$  360° to the nearest degree.

C2) Determine the value of sin4.5 to 3 decimal places.

D2) Determine the exact value of tan 315°.

E2) If the terminal arm of  $\theta$  passes through point P(-5, 12), determine the exact values of the six trig ratios.

F2) If  $\theta$  is in the 3<sup>rd</sup> quadrant and  $\tan \theta = \frac{2}{5}$ , determine the exact value of  $\cos \theta$ .

G2) Given the information in question F1 above, determine all possible values of  $\theta$  in the domain -360°  $\leq \theta \leq$  360° to the nearest degree.

H1) Determine the length of the arc that subtends an angle of 5 radians at the centre of a circle with radius 8cm.

I1) Convert 150° to exact radians.

J1) Sketch the angle  $\theta = \frac{5\pi}{4}$  in standard position.

K1) Determine the measure of two angles that are coterminal with the angle  $\theta = \frac{5\pi}{4}$ . Write an expression for all angles that are coterminal with  $\theta$  (in the domain  $\theta \in \mathbb{Z}$ ). H2) Determine the central angle, in radians and nearest degree, of a circle with radius 4 cm and arc length of 12 cm.

I2) Convert  $\theta = \frac{2\pi}{3}$  to degrees.

J2) Sketch the angle  $\theta = -\frac{7\pi}{6}$  in standard position.

K2) Determine the measure of the angles that are coterminal with the angle  $\theta = -\frac{7\pi}{6}$  in the domain  $-4\pi \le \theta \le 4\pi$ . Write an expression for all angles that are coterminal with  $\theta$  (in the domain  $\theta \in \mathbb{Z}$ ).

L1) Determine the exact value of  $\sin \frac{8\pi}{3}$ .

G3) If  $\theta$  is in the 2<sup>nd</sup> quadrant and  $\sin \theta = \frac{3}{5}$ , determine all possible values of  $\theta$  in the domain  $-2\pi \le \theta \le 2\pi$  to one decimal place.