1) Draw $155^\circ$. Determine the quadrant in which the angle lies.

2) Convert the angle $210^\circ$ to radians.

3) Convert the angle $\frac{11\pi}{6}$ to degrees.

4) A truck travels 5000 meters up a mountain road. The change in height from the bottom to the top is 400 meters. Find the angle of inclination of the road.

5) Find $\cos \frac{4\pi}{3}$.

6) Solve the equation for $x$ between $0^\circ$ to $360^\circ$

   $5 \tan x - 2 = 4$

7) Graph each function.
   a) $y = 3 \sin (2x + 120^\circ)$
   b) $y = -2 \cos (x - 90^\circ)$

8) Find the phase shift of $y = \sin (3x - 150^\circ)$

9) Find the periodic cycle of $y = -\cos (x + 45^\circ)$