1. \( f(x) = \sin x, \  g(x) = \ln x, \  h(x) = \cos x, \  k(x) = \sin^{-1} x \)

   Find \( (k \circ h \circ f \circ g)(1) \)

2. Find the average rate of change of \( f(x) = \cos x \) from \( x = 0 \) to \( x = \frac{2\pi}{3} \).

3. Take the points on the graph of \( y = \sin x \) with x-coordinates 0 and \( \frac{\pi}{6} \) and connect them with a line. (This line is called a secant line.)

   a) Find the slope of this line.

   b) Find the equation of this line. Write your final answer in the form \( y = mx + b \).