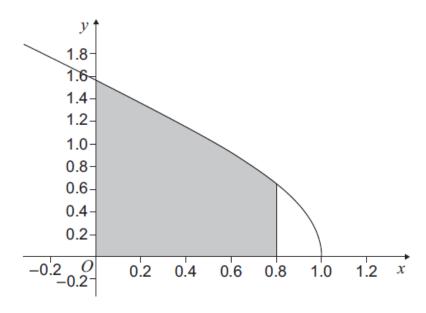
AQA – Numerical methods – A2 Further Mathematics P2

1. June/2020/Paper_2/No.7

The diagram shows part of the graph of $y = \cos^{-1} x$



The finite region enclosed by the graph of $y = \cos^{-1} x$, the y-axis, the x-axis and the line x = 0.8 is rotated by 2π radians about the x-axis.

Use Simpson's rule with five ordinates to estimate the volume of the solid formed. Give your answer to four decimal places.

[5 marks