

Solution 23.4

The true value is $-\sin(\pi/4) = -0.70710678$.

$$D(\pi / 3) = \frac{-0.25882 - 0.965926}{2(1.047198)} = -0.58477$$

$$D(\pi / 6) = \frac{0.258819 - 0.965926}{2(0.523599)} = -0.67524$$

$$D = \frac{4}{3}(-0.67524) - \frac{1}{3}(-0.58477) = -0.70539$$