Answer on Question #41265 – Physics - Other

Let's determine the value of sine S to the nearest thousandth:

$$S = \sin 300° \approx -0.866$$

Then the value of sine S':

$$S' = \sin(300 + 5)° \approx -0.819$$

After that we can determine the error:

$$|S' - S| = |-0.819 - (-0.866)| = 0.047$$

Answer: the error in the measurement of sine ≈ 0.047.