

Questions about the Test

Problem #10b

$$\int \frac{\cos(\ln x)}{x} dx$$

$$u = \ln x$$

$$du = \frac{1}{x} dx$$

$$\int \frac{\cos(\ln x)}{x} dx = \int \cos(\ln x) \frac{1}{x} dx = \int \cos u du = \sin u + C = \sin(\ln x) + C$$