

**Answer to question # 50929**

**Integrate with respect to x :**

$$\int \cos x \sin x dx$$

**Solution**

Let  $\cos x = u$ , then  $du = -\sin x dx$ . So, we can rewrite integral

$$-\int u du = -\frac{u^2}{2} + C$$

According substitution we have

$$-\frac{(\cos x)^2}{2} + C$$

**Answer:**  $-\frac{(\cos x)^2}{2} + C$