

$$\int \operatorname{sen} x \cdot \operatorname{sen}(\cos x) dx =$$

INT-S1-022

TIPO: $\int f'(x) \operatorname{sen} f(x) dx = \cos f(x) + k$

SOSTITUZIONE:

$$\cos x = z$$

NON ESPlicito x

$$\frac{dz}{dx} = -\operatorname{sen} x \rightarrow dx = -\frac{1}{\operatorname{sen} x} dz$$

$$= \int \cancel{\operatorname{sen} x} \cdot \operatorname{sen} z \left(-\frac{1}{\cancel{\operatorname{sen} x}} \right) dz$$

$$= - \int \operatorname{sen} z dz = \cos z + k =$$

$$= \boxed{\cos(\cos x) + k}$$