

## integrali impropri 2

(1) 1.

MULTIPLE CHOICE    marked out of 1.0    penalty 0.10    One answer only    Shuffle

Calcolare

$$\lim_{x \rightarrow 0^+} \frac{1}{x} \int_x^{2x} \frac{1}{\sin t} dt$$

- +∞ ✓
- 2
- 1
- π

(2) 2.

MULTIPLE CHOICE    marked out of 1.0    penalty 0.10    One answer only    Shuffle

Calcolare

$$\lim_{x \rightarrow 0} \frac{1}{x^4} \int_{\sin^2 x}^{\sin x} \frac{2 - t \sin t - 2 \cos t}{e^t - 1} dt$$

- $\frac{1}{48}$  ✓
- $\frac{1}{2}$
- 1
- $\frac{1}{6}$

(3) 3.

MULTIPLE CHOICE    marked out of 1.0    penalty 0.10    One answer only    Shuffle

Posto

$$I = \int_{-\infty}^{+\infty} e^{-x^2} dx$$

calcolare

$$\int_{-\infty}^{+\infty} x^2 e^{-x^2} dx.$$

- $\frac{I}{2}$  ✓
- $I^2$
- $\sqrt{I}$
- $I - 1$

Total of marks: 3