

# Continuous assessment

## Test N° 1

**Exercise: (./8pts)** Calculate the following integrals:

1.

$$\int \cos(x)e^x dx$$

**Indication:** use the integration by parts.

2.

$$\int \frac{x^4 + 2x^2 - 1}{(x-1)(x^2+1)} dx$$

**Indication:** use the decomposition of the fraction.

3.

$$\int \cos(x) \sin(2x) dx$$

**Indication:** use the trigonometric functions proprieties.

*Good luck*