

**Matemática 4**  
**Tercer Parcial**

Apellidos:

Nombres:

ci:

1. Resolver

- $\tan^2(x + y)dx - dy = 0$
- $(2 + 2x^2y^{1/2})ydx + (x^2y^{1/2} + 2)xdy = 0$

2. Resolver

$$y \ln(y)dx + (x - \ln(y))dy = 0$$

3. Resolver

$$\frac{dy}{dx} + y = y^2(\cos(x) - \sin(x))$$

4. Resolver

$$y \frac{dy}{dx} = \cos(x)(2 \cos(y) - \sin^2(x))$$

NOTA  $\sin(x) = \text{sen}(x)$