

Quiz #1:

Solve

$$\sqrt{3-y^2}e^{4x} \sin 2x dx + 7 \cos x dy = 0$$

Quiz #2:

Find an annihilator for the expression

$$12x^3 e^{-2x} \sin 5x - \frac{1}{\sqrt{\pi}} (e^x + x)^3 + \sin 2x$$

Quiz #3:

Solve using power series

$$3y' - xy = 0$$

Quiz #4:

Solve

$$\begin{cases} x' = 5x - 4y \\ y' = x + 2z \\ z' = 2y + 5z \end{cases}$$