

University of Bahrain
Department of Mathematics
MATHS101: Calculus I
Dr. Abdulla Eid



Worksheet: Initial Value Problems

Students' Name: _____

1. Solve the following initial value problems

1. $\frac{dy}{dx} = 9x^2 - 4x + 5$ and $y(-1) = 0$.

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2. $\frac{d^2y}{dt^2} = \cos t + \sin t$ and $y'(\pi) = 0, y(\pi) = 1$

3. $y' = \frac{3}{1+x^2}, \quad y'(1) = 5$

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