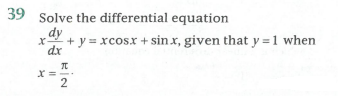
**Expert ID/Name: Nstructive**

**Date: 20-Nov-2020**

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**Answer:**

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| **Section 1:** Algorithm/Theorem Reminder / A tip for solving these type of questions |
| **Tips:**  1 .Integrating factor of is.  2.  3. General solution of is |

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| **Section 2:** Step-by-step answer |
| Given: The differential equation is  To find: The particular solution of given that when  Step 1:   |  |  | | --- | --- | | Instruction | Convert and Compare the given differential equation with | | Calculation | Compare with |   Step 2:   |  |  | | --- | --- | | Instruction | 1. Integrating factor of is.  2. | | Calculation |  |   Step 3:   |  |  | | --- | --- | | Instruction | 1.General solution of is | | Calculation | Now, when      Hence, the solution is . | |

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| **Section 3:** |
| Final answer: The particular solution of  given that when  is. |