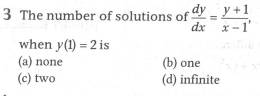
**Expert ID/Name: Nstructive**

**Date: 09-Nov-2020**



**Answer:**

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| MCQ Type Answers |
| Choices   1. none 2. one 3. two 4. infinite |

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| --- |
| Tips:  1 .Separate the terms dy and dx.  2 .Apply the integration on both sides.  3 .Recall the standard integration formulae and substitute to get the value of constant. |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Correct Answer: (b)  Given : differential equation is  To find: Number of solutions of differential equation is  Explanation:  Step 1:   |  |  | | --- | --- | | Instruction | Separate the terms dy and dx. | | Calculation |  |   Step 2:   |  |  | | --- | --- | | Instruction | Apply the integration on both sides.  Use the formula | | Calculation |  |   Step 3:   |  |  | | --- | --- | | Instruction | Put,  in | | Calculation | Therefore, the required solution is and | |

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| Final answer: one  i.e. The number of solutions of is only one solution when . |