**Expert ID/Name: Nstructive**

**Date: 09-Nov-2020**

**C:\Users\chari\Desktop\29.PNG**

**Answer:**

|  |
| --- |
| **Section 1:** Algorithm/Theorem Reminder / A tip for solving these type of questions. |

|  |
| --- |
| Tips:  1. Separate the terms of.  2. Apply the integration on both sides.  3. Recall the method of substitution in integration.  4. |

|  |
| --- |
| Section 2: Step-by-step answer. |
| Given: differential equation is  To find: The initial solution of differential equation is  Explanation: -  Step 1:   |  |  | | --- | --- | | Instruction | Separate the terms dy and dx. | | Calculation |  |   Step2:   |  |  | | --- | --- | | Instruction | Apply the integration on both sides and use the formula | | Calculation |  |   Step3:   |  |  | | --- | --- | | Instruction | Substitute the values of . | | Calculation | Now,      Which is the required particular solution of given differential equation. | |
| Conclusion: Particular solution of differential equation  is .  Hence, verified. |