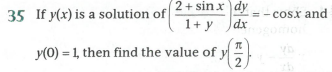
**Expert ID/Name: Nstructive**

**Date: 09-Nov-2020**

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**Answer:**

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

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

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| Section 2: Step-by-step answer. |
| Given: differential equation is  and.  To find: The particular solution of differential equation is  and.  Explanation: -  Step 1:   |  |  | | --- | --- | | Instruction | Separate the terms dy and dx. | | Calculation |  |   Step2:   |  |  | | --- | --- | | Instruction | Apply the integration on both sides and use the substitution method of integration. | | Calculation | In , Put |   Step3:   |  |  | | --- | --- | | Instruction | Substitute the values in. | | Calculation | Now, take |   Step3:   |  |  | | --- | --- | | Instruction | Simplify hence find. | | Calculation |  |   Conclusion: Particular solution of differential equation  is  and  Hence, verified. |