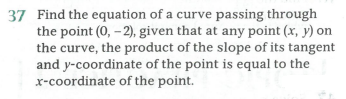
**Expert ID/Name: Nstructive**

**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. Form the differential equation by using given condition.  2. Apply the integration on both sides.  3. Substitute the point in the solution of differential equation. |

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| Section 2: Step-by-step answer. |
| Given: Any point on the curve, the product of the slope of its tangent and -coordinate of the point is equal to the -coordinate of the point.  To find: Equation of the curve passing through the point on the curve, the product of the slope of its tangent and -coordinate of the point is equal to the -coordinate of the point.  Explanation: -  Step 1:   |  |  | | --- | --- | | Instruction | Form the equation by using given condition and then apply the integration on both sides hence simplify. | | Calculation | We know that the slope of the tangent to the curve is given by .  According to the question, the product of the slope of its tangent and -coordinate of the point is equal to the -coordinate of the point. |   Step2:   |  |  | | --- | --- | | Instruction | Substitute the point in. | | Calculation | Since the curve passes through the point .      Which is the required particular solution of given differential equation. |   Conclusion: - Particular solution of differential equation  is .  Hence, verified. |