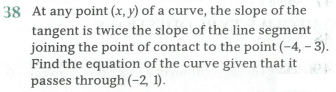
**Expert ID/Name: Nstructive**

**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.  4.Slope of the line segment passing through the points is . |

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| Section 2: Step-by-step answer. |
| Given: Any point on the curve, the slope of its tangent is twice the slope of the line segment joining the point of contact to the point .  To find: Equation of the curve passing through the point .  Explanation: -  Step 1:   |  |  | | --- | --- | | Instruction | Form the equation by using given condition and separate the terms . | | Calculation | Slope of the line segment joining the points and is  According to the question ,  Slope of the tangent is twice the slope of the line segment. |   Step2:   |  |  | | --- | --- | | Instruction | Apply the integration on both sides.  Use the formula: | | Calculation |  |   Step2:   |  |  | | --- | --- | | Instruction | Substitute the point in. | | Calculation | Given, the curve is passing through .    Now,    Which is the required equation. |   Conclusion: Particular solution of differential equation  is .  Hence, verified. |