**Expert ID/Name: Nstructive**

**Date: 05-Nov-2020**

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**Answer:**

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| Short answer type question |

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| Tips:   1. Equation of the system of circles with centre is , where a is the radius of the circles. 2. Differentiate with respect to “x” on both sides. |

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| Given: Equation of the system of circles with centre ,  To find\determine\prove: Form the differential equation of the system of circles with centre .  Explanation: -  Step1:   |  |  | | --- | --- | | Instruction | Equation of the system of circles with centre is , where a is the radius of the circles. | | Calculation | Equation of the system of circles with centre is |   Step2:   |  |  | | --- | --- | | Instruction | Differentiate  with respect to “x” on both sides. | | Calculation | Hence, The required differential equation is . | |
| Conclusion: The differential equation of  is .  Hence verified. |