|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. The solution of the initial value problem is , where  (Select the correct answer.)  ​   |  |  |  | | --- | --- | --- | |  | a. | 2 | |  | b. | -2 | |  | c. | 3 | |  | d. | -3 | |  | e. | 1 |  |  |  | | --- | --- | | *ANSWER:* | a | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2. The solution of the initial value problem is , where  Select the correct answer.  ​   |  |  |  | | --- | --- | --- | |  | a. | 2 | |  | b. |  | |  | c. |  | |  | d. |  | |  | e. | 1 |  |  |  | | --- | --- | | *ANSWER:* | b | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3. The initial value problem has a unique solution guaranteed by Theorem 1.1 if  Select the correct answer.  ​   |  |  |  | | --- | --- | --- | |  | a. |  | |  | b. |  | |  | c. |  | |  | d. |  | |  | e. |  |  |  |  | | --- | --- | | *ANSWER:* | c | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4. The solution of the initial value problem is , where  (Select the correct answer.)  ​   |  |  |  | | --- | --- | --- | |  | a. |  | |  | b. | 3 | |  | c. |  | |  | d. |  | |  | e. |  |  |  |  | | --- | --- | | *ANSWER:* | a | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5. The solution of the initial value problem is , where  (Select the correct answer.)  ​   |  |  |  | | --- | --- | --- | |  | a. | 2 | |  | b. |  | |  | c. |  | |  | d. |  | |  | e. | 1 |  |  |  | | --- | --- | | *ANSWER:* | b | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6. The initial value problem has a unique solution guaranteed by Theorem 1.1 if  Select the correct answer.  ​   |  |  |  | | --- | --- | --- | |  | a. |  | |  | b. |  | |  | c. |  | |  | d. |  | |  | e. |  |  |  |  | | --- | --- | | *ANSWER:* | d | |