|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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 ifSelect 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 ifSelect the correct answer.​

|  |  |  |
| --- | --- | --- |
|   | a.  |  |
|   | b.  |  |
|   | c.  |  |
|   | d.  |  |
|   | e.  |  |

|  |  |
| --- | --- |
| *ANSWER:* | d |

 |