|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. Copy the points (–2, 5), (3, –5), (–4, –1), (4, 0), (2, –3) in the Cartesian plane.​

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

|  |  |
| --- | --- |
| *ANSWER:* | c |
| *POINTS:* | 1 |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | True |
| *DATE CREATED:* | 1/21/2016 10:01 AM |
| *DATE MODIFIED:* | 7/13/2017 3:56 AM |

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| 2. Find the distance between the points (–2, –5) and (–7, –10). Round your answer to the nearest hundredth if necessary.​

|  |  |  |
| --- | --- | --- |
|   | a.  | 17.49 |
|   | b.  | 0 |
|   | c.  | 7.07 |
|   | d.  | 3.16 |
|   | e.  | 50 |

|  |  |
| --- | --- |
| *ANSWER:* | c |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | True |
| *DATE CREATED:* | 1/21/2016 10:01 AM |
| *DATE MODIFIED:* | 7/13/2017 4:08 AM |

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| 3. Find the midpoint of the line segment joining between the points (7, –1) and (2, –6). Round your answer to the nearest hundredth if necessary.​

|  |  |  |
| --- | --- | --- |
|   | a.  | (4, 2.5) |
|   | b.  | (4.5, –3.5) |
|   | c.  | (14, 6) |
|   | d.  | (3, –2) |
|   | e.  | none of these choices |

|  |  |
| --- | --- |
| *ANSWER:* | b |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | True |
| *DATE CREATED:* | 1/21/2016 10:01 AM |
| *DATE MODIFIED:* | 7/13/2017 4:20 AM |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4. Find the length of each side of the right triangle from the following figure. ​

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

|  |  |
| --- | --- |
| *ANSWER:* | a |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Medium |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | True |
| *DATE CREATED:* | 1/21/2016 10:01 AM |
| *DATE MODIFIED:* | 7/13/2017 4:45 AM |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5. Find *x* such that the distance between the points  and   is 5.​

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

|  |  |
| --- | --- |
| *ANSWER:* | c |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Medium |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | True |
| *DATE CREATED:* | 1/21/2016 10:01 AM |
| *DATE MODIFIED:* | 4/5/2017 6:17 AM |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6. Assume that the number (in millions) of cellular telephone subscribers in the United States from 1996 through 2005 is given in the following table. Use a graphing utility to graph a line plot of the given data. Describe any trends that appear within the last four years.​

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year  | 1996 | 1997 | 1998 | 1999 | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  |
|  Subscribers | 56 | 62.3 | 71.5 | 79.7 | 97.4 | 117.9  | 136.5  | 158.4 | 195 | 214.1  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | a.  | ​The number of subscribers appears to be increasing. | b.  | ​The number of subscribers appears to be decreasing. |
|   | c.  | ​The number of subscribers appears to be constant. | d.  | ​The number of subscribers appears to be decreasing |
|   | e.  | ​The number of subscribers appears to be increasing. |  |  |

|  |  |
| --- | --- |
| *ANSWER:* | a |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *QUESTION TYPE:* | Multiple Choice |
| *HAS VARIABLES:* | True |
| *DATE CREATED:* | 1/21/2016 10:01 AM |
| *DATE MODIFIED:* | 3/31/2017 8:48 AM |

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