NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ HOUR\_\_\_\_\_\_

**Unit 6- Geometry REVIEW**

|  |  |
| --- | --- |
| **Question 1****Consider this figure.**  Image result for right triangle**Enter the area of the right triangle, in square****centimeters.**  **square centimeters** | **Question 2****Ramon was plotting the coordinates of a polygon.  He has  plotted the coordinates of the polygon shown below.  What  is the area of Ramon's polygon?** **1.  Point**A**(2, 5) 2.  Point B (8, 5) 3.  Point C (8, 9) 4.  Point D (5, 7) 5.  Point E (2, 9)** https://imagebank.illuminateed.com/imagebank/379989  **square units** |
| **Question 3**Image result for irregular polygon In the figure shown above, all the corners form right angles.  What is the area of the figure?

|  |
| --- |
| 1. 8 m2
 |
| 1. 19 m2
 |
| 1. 16 m2
 |
| 1. 18 m2
 |

 | **Question 4****Use this figure to answer the questions that follow.** https://imagebank.illuminateed.com/imagebank/448741 **Part A: What is the area of triangle FIJ?****Part B: What is the area of parallelogram FGHJ?** |
| **Question 5**A cube has edges of 3 ½ inches. How many cubes with side lengths of ½ inches would be needed to fill the prism?

|  |  |  |
| --- | --- | --- |
| A | 343 cubes |  |
| B | 34.3 cubes |  |
| C | 7 cubes |  |
| D | 85.75 cubes |  |

 | **Question 6****A quadrilateral has the following vertices on a coordinate  plane:** **Point J: (3, –6)** **Point K: (–1, –6)** **Point L: (–1, 2)** **Point M: (3, 2)** **Enter the length of side KL.**  **units**https://imagebank.illuminateed.com/imagebank/448744 |
| **Question 7** Carterville was built along a grid using a coordinate plane. City Hall, the Fire Department, and the Police Department are the vertices of a triangle. City Hall is located at (1, 4), the Fire Department is located at (-3, 4) and the Police Department is located at (1, -2). Each square on the coordinate plane is equal to 1 square mile. Which department is closer to City Hall and by how much?

|  |  |  |
| --- | --- | --- |
| A | The Fire Department is closer to City Hall by 4 miles. |  |
| B | The Police Department is closer to City Hall by 6 miles. |  |
| C | The Police Department is closer to City Hall by 2 miles. |  |
| D | The Fire Department is closer to City Hall by 2 miles. |  |

 | **Question 8**Which of the following sets of coordinates represents  the image shown below? https://imagebank.illuminateed.com/imagebank/368335

|  |  |  |
| --- | --- | --- |
| A | (–5 , 6), (–5 , –4), (2 , 6), (2 , –4) |  |
| B | (6 , –5), (–4 , 5), (6 , 2), (–4 , 2) |  |
| C | (5 , –6), (5 , 4), (–2 , –6), (–2 , 4) |  |
| D | (–6 , 5), (4 , 5), (–6 , –2), (4 , –2) |  |

 |
| **Question 9**Image result for rectangular prism **Calculate the volume of the rectangular prism in the  diagram above.**

|  |  |  |
| --- | --- | --- |
|  | A | 330 cm3 |
|  | B | 302 cm3 |
|  | C | 22 cm3 |
|  | D | 130 cm3 |

 | **Question 10****Consider this figure.** https://imagebank.illuminateed.com/imagebank/833557 **Enter the volume of this right rectangular prism in cubic inches.**  |
| **Question 11**Philip claims this net will fold to form a triangular pyramid.**https://imagebank.illuminateed.com/imagebank/375456 Is Philip correct?**

|  |  |  |
| --- | --- | --- |
| A | Yes. |  |
| B | No, because a triangular pyramid does not have four faces. |  |
| C | No, because all the faces of a triangular pyramid are triangles. |  |
| D | No, because even though the net uses the correct type and number of shape, they are positioned incorrectly. |  |

 | **Question 12****What is the surface area of the net shown below?** Image result for surface area of net |
| **Question 13****What is the surface area of the box shown by the pattern below?** Image result for surface area of a box net |