**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Core: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Unit 1 Review: Surface Area & Volume**

1. Find the **surface area** and **volume** of the rectangular prisms. Show your setups.

 

6 m

12 m

5 m

12 in

22 in

35 in

Surface Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Surface Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Volume = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Volume = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Find the surface areaof the square pyramids. Show your setups.

8 ft

  

11 ft

Surface Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Surface Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Find the surface area of the triangular prisms. Show your setups.

 

3 ft

4 ft

5 ft

14 cm

10 cm

17 cm

18 cm

Surface Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Surface Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

  

8 in

44 in

 20 in

 Surface Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Surface Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Name each polyhedron giving their nets.

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

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ c. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ d. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Find the surface area and volume for each rectangular prism. Show your setups.

  

 Volume = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Volume = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 SA = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ SA = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Sandra painted her bedroom. Her room is in the shape of a rectangular prism 15 feet long, 12 feet wide and 10 feet tall. If she paints everything but the floor how much surface area does Sandra paint?
2. Find the **surface area** and **volume** of each cube.

|  |  |  |  |
| --- | --- | --- | --- |
| Solid Figure | Side length | Surface Area (ft2) | Volume (ft3) |
| A. Cube |  16 ft |  |  |
| B. Cube | 5 ft |  |  |
| C. Cube | * 1. ft
 |  |  |

Setups: Surface Area Setups: Volume

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |
| --- |
| 9. Find the area of each square. |
| Figure | Side length (in) |  Area (in2) |
|  Square |  34 in |  |
| Square | 4.5 in |  |
| Square |  18 in |  |
| 10. Find the side length for each giving area. |
| Figure | Area(cm2) | Side length (cm) |
| Square | 144cm2 |  |
| Square | 225cm2 |  |
| Square | 64cm2 |  |

11. Which figure has a greater surface area? What is the surface area of each? Each edge is 1

 centimeter in measurement.

# 1 surface area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

#2 surface area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



12.



1. Surface area of small cube = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Surface area of the larger cube = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Total surface area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Surface area of the original composite figure = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Why is one of the surface areas less than the other?