# **NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_DATE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_PER.\_\_\_\_\_\_**

##  **Chapter 12 Test Review**

**5 points added to your test, if complete.**

PRISMS

For each of the following prisms, find the Lateral Area, Surface Area, and Volume.

|  |  |
| --- | --- |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |

Find the indicated measure.

|  |  |
| --- | --- |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 | Find the Surface Area of a cube with an edge length of . |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 | Find the Volume of a cube with edge length of . |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 | Find the Surface Area of a triangular prism whose base is an isosceles right triangle with legs of , and the height of the prism is . |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 | Find the Volume of a rectangular prism with a length of , width of , and height of . |

# **CYLINDERS**

**For each of the problems below, find the indicated value(s). Answers should be EXACT.**

|  |  |
| --- | --- |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_
 | A right circular cylinder has a Lateral Area of and a radius of . Find the height of the cylinder. |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_
 | Find the Volume of a right circular cylinder with a radius of and an altitude of . |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_
 | The Lateral Area of a cylinder is . Its height has a length of . Find the diameter of the circle. |

PYRAMIDS

**Find the Lateral Area, Surface Area, and Volume for each of the following regular pyramids.**

|  |  |
| --- | --- |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |

**CONES**

**Find the indicated value(s) below. Answers should be EXACT.**

|  |  |
| --- | --- |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_
 | Find the Volume of a right circular cone with a radius of and an altitude of . |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_
 | The base area of a cone is and the volume is . Find its height. |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_
 | The Lateral Area of a cone is . The radius of the cone is . Find the height of the cone. |

**SPHERES**

**Find the indicated value(s) for each of the following. Answers should be EXACT.**

|  |  |
| --- | --- |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_
 | The Volume of a sphere is . Find the length of the radius. |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_
 | The Surface Area of a sphere is . Find the length of its radius. |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_
 | The circumference of a great circle of a sphere is . Find the Surface Area of the sphere. |

REVIEW

Find the area for each of the following.

|  |  |
| --- | --- |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_
 | Find the area of a regular triangle with a perimeter of . |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_
 | A rectangle has an area of . What would be its new area if one of its dimensions was , and the other was reduced to its original length? |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_
 | Find the area of the square:  |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_
 | The base of a prism is a rectangle that is long and wide. If the prism has a height of , what is its total area? |

A Mishmash of Answers: