$\qquad$ Period $\qquad$
Chapter 11 Study Guide \#1

| 1. Find the area of a circle with a diameter of 30 inches. | 2. The circumference of a circle is $12 \pi$, what is the radius |
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| 3. Find the volume. |  |
| 5. Find the volume |  |


| 11. Find the radius of a sphere with a surface area of $1024 \pi \mathrm{in}^{2}$. | 12. Find the radius of a sphere with a surface area of $196 \pi \mathrm{in}^{2}$. |
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| 13. The volume of a cylinder is $100 \pi \mathrm{in}^{3}$. The height of the cylinder is 6 in . Calculate the radius of the cylinder to the nearest tenth of a centimeter. | 14. The volume of a cylinder is $5428.7 \mathrm{in}^{3}$. The height of the cylinder is 3 in. Calculate the radius of the cylinder to the nearest tenth of a centimeter. |
| 15. Mrs. Claus is taking an art class. Her art project is to make a cone vase. If the vase has a volume of $157 \mathrm{in}^{3}$, and a diameter of 10 inches. What is the height to the nearest inch? | 16. The base of a pyramid is a rectangle with a width of 8 cm and a length of 9 cm . Find the height of the pyramid if the volume is $264 \mathrm{~cm}^{3}$. |
| 17. The volume of a cylinder is $375 \pi \mathrm{in}^{3}$. If the height is 15 in , what is the length of the diameter? | 18. Find the surface area of a sphere with a great circle that has an area of $400 \pi \mathrm{mi}^{2}$. |
| 19. A rectangular prism measuring 6 in and 3 in along the base and 6 in tall. | 20. <br> A prism 8 in tall with a right triangle for a base with side lengths 3 in, 4 in , and 5 in . |

