$\qquad$
$\qquad$
Unit 6 (Part 2) Review
Prisms

| 1. Determine the volume of |
| :--- | :--- | :--- | :--- |
| a rectangular prism that has |
| a base length of 7 in a base |
| height of 11 in and a height |
| of 10 in . | | 2. Determine the volume of |
| :--- |
| the rectangular prism. | | 3. If the figure below were |
| :--- |
| dilated by a scale factor of |
| $k=5$, what would the |
| volume of the dilated figure |
| be? |

Cylinders

| 5. Determine the volume of <br> a cylinder that has a radius <br> of 12 in and a height of 11 in. | 6. Determine the volume of <br> the cylinder. Leave your <br> answer in terms of pi. |
| :--- | :--- |
|  |  |
|  |  |

7. If the figure below were dilated by a scale factor of $k=4$, what would the volume of the dilated figure be?


## Pyramids

| 9. Determine the volume of | 10 . Determine the volume of |
| :--- | :--- |
| a square pyramid that has a |  |
| base length of 16 in, a height |  |
| of 6 in and a slant height of |  |
| 10 in. |  |

11. If the figure below were dilated by a scale factor of $k=2$, what would the volume of the dilated figure be?

12. A cylinder has a volume of $363 \pi$ in $^{3}$. Determine the radius if the height is 3 in .
13. A square pyramid has a volume of $96 \mathrm{in}^{3}$. Determine the base length if the height is 2 in .
$\qquad$
$\qquad$
Cones

| 13. Determine the volume of |  |  |  |
| :--- | :--- | :--- | :--- |
| a cone that has a radius of 15 |  |  |  |
| cm, a height of 8 cm and a |  |  |  |
| slant height of 17 cm. | 14. Determine the volume of <br> the cone. Leave your answer <br> in terms of pi. | 15. If the figure below were <br> dilated by a scale factor of <br> $k=3$, what would the <br> volume of the dilated figure <br> be? | 16. A cone has a volume of <br> $16 \pi$ in ${ }^{3}$. Determine the <br> radius if the height is 12 in. |

## Spheres

| 17. Determine the volume of a sphere |  |
| :--- | :--- | :--- |
| that has a radius of 15 cm . | 19. If the figure below were dilated by a <br> scale factor of $k=2$, what would the the volume of the given <br> volume of the dilated figure be? |

Unit 6 (Part 2) Review Answers


