

Surface Area and Volume Answer Key

Prism and Cylinder

1. $SA = 202 \text{ in}^2$

$V = 180 \text{ in}^3$

2. $SA = 382 \text{ in}^2$

$V = 330 \text{ in}^3$

3. $SA = 130 \text{ in}^2$

$V = 100 \text{ in}^3$

4. $SA = 120 \text{ in}^2$

$V = 72 \text{ in}^3$

5. $SA = 464 \text{ in}^2$

$V = 336 \text{ in}^3$

6. $SA = 250\pi \text{ in}^2$

$V = 500\pi \text{ in}^3$

7. $SA = 44\pi \text{ in}^2$

$V = 36\pi \text{ in}^3$

8. $SA = 256\pi \text{ in}^2$

$V = 512\pi \text{ in}^3$

9. $SA = 84\pi \text{ in}^2$

$V = 99\pi \text{ in}^3$

10. $SA = 114\pi \text{ in}^2$

$V = 144\pi \text{ in}^3$

11. $SA = 360 \text{ in}^2$

$V = 378 \text{ in}^3$

12. $SA = 192\pi \text{ in}^2$

$V = 360\pi \text{ in}^3$

Pyramid and Cone

1. $SA = 360 \text{ in}^2$

$V = 400 \text{ in}^3$

2. $SA = 1276 \text{ in}^2$

$V = 2298.65 \text{ in}^3$

3. $SA = 436.87 \text{ in}^2$

$V = 326.67 \text{ in}^3$

4. $SA = 260 \text{ in}^2$

$V = 208.17 \text{ in}^3$

5. $SA = 923.16 \text{ in}^2$

$V = 1512 \text{ in}^3$

6. $SA = 1000 \text{ in}^2$

$V = 1490.71 \text{ in}^3$

7. $SA = 55.40\pi \text{ in}^2$

$V = 48\pi \text{ in}^3$

8. $SA = 144\pi \text{ in}^2$

$V = 128\pi \text{ in}^3$

9. $SA = 42\pi \text{ in}^2$

$V = 31.75\pi \text{ in}^3$

10. $SA = 144\pi \text{ in}^2$

$V = 128\pi \text{ in}^3$

11. $SA = 28.33\pi \text{ in}^2$

$V = 16\pi \text{ in}^3$

12. $SA = 55\pi \text{ in}^2$

$V = 27.64\pi \text{ in}^3$

Sphere

1. $SA = 256\pi \text{ in}^2$ 2. $SA = 64\pi \text{ in}^2$ 3. $SA = 324\pi \text{ in}^2$

$V = 682.67\pi \text{ in}^3$ $V = 85.33\pi \text{ in}^3$ $V = 972\pi \text{ in}^3$

4. $SA = 400\pi \text{ in}^2$ 5. $SA = 484\pi \text{ in}^2$ 6. $SA = 144\pi \text{ in}^2$

$V = 1333.33\pi \text{ in}^3$ $V = 1774.67\pi \text{ in}^3$ $V = 288\pi \text{ in}^3$

7. $SA = 576\pi \text{ in}^2$ 8. $D = 48 \text{ in}$ 9. $SA = 21.54\pi \text{ in}^2$

$V = 2304\pi \text{ in}^3$ $V = 18432\pi \text{ in}^3$ $r = 2.32 \text{ in}$