$\square$
$\square$

## Volume and Surface Area

Fill in the missing values for a rectangular prism.


Find the volume of each solid to the nearest tenth. (use $\pi=3.14$ )

| 4. $\begin{aligned} & \mathrm{a}=5.16 \mathrm{in} \\ & \mathrm{~b}=7 \mathrm{in} \\ & \mathrm{c}=13 \mathrm{in} \end{aligned}$ | 5. $\begin{aligned} & \mathrm{a}=25 \mathrm{yd} \\ & \mathrm{~b}=55 \mathrm{yd} \end{aligned}$ | 6. $\begin{aligned} & \mathrm{a}=23.5 \mathrm{ft} \\ & \mathrm{~b}=65.6 \mathrm{ft} \end{aligned}$ |
| :---: | :---: | :---: |
|  |  |  |

Find the volume of each solid to the nearest tenth. (use $\pi=3.14$ )

| $\begin{aligned} & a=6 \\ & b= 6 \mathrm{~cm} \end{aligned}$ | 8. $\begin{aligned} & \mathrm{a}=9 \text { in } \\ & \mathrm{b}=7 \text { in } \\ & \mathrm{c}=9 \text { in } \end{aligned}$ | 9. $\mathrm{a}=8.1 \mathrm{yd}$ |
| :---: | :---: | :---: |
|  |  |  |

Find the volume of each solid to the nearest tenth. (use $\pi=3.14$ )
10. cylinder: radius $=8 \mathrm{~m}$, height $=13 \mathrm{~m}$
11. triangular prism: $B=26 \mathrm{~cm}^{2}, \mathrm{~h}=16 \mathrm{~cm}$
$\square$

Find the surface area of each solid to the nearest tenth. (use $\pi=3.14$ )

| 12. $\begin{aligned} & \mathrm{a}=14.6 \text { in } \\ & \mathrm{b}=16 \text { in } \end{aligned}$ | 13. $\begin{aligned} & \mathrm{a}=16 \mathrm{~mm} \\ & \mathrm{~b}=4 \mathrm{~mm} \end{aligned}$ | 14. $\begin{aligned} & \mathrm{a}=25 \mathrm{~cm} \\ & \mathrm{~b}=29 \mathrm{~cm} \\ & \mathrm{c}=34 \mathrm{~cm} \end{aligned}$ |
| :---: | :---: | :---: |
|  |  |  |

Find the surface area of each solid to the nearest tenth. (use $\pi=3.14$ )

| 15. $\begin{aligned} \mathrm{a} & =19 \mathrm{~mm} \\ \mathrm{~b} & =10 \mathrm{~mm} \\ \mathrm{c} & =10 \mathrm{~mm} \end{aligned}$ | 16. $\mathrm{a}=2.22 \mathrm{~cm}$ | 17. $\mathrm{a}=19 \mathrm{in}$ |
| :---: | :---: | :---: |
|  |  |  |

## Complete.

18. How much cement is needed to build a sidewalk that is eight hundred nineteen feet long, four feet wide and three inches thick? Round your answer to the nearest cubic foot.
19. A water tank has been purchased for the farm. It will be used to water cattle. It is an oval shaped metal container that is 3.4 feet tall. The area of the bottom of the tank is 13.9 square feet. If the cattle drink one hundred ninety-two cubic feet of water a day, how many times per day will the tank have to be filled?
