Make a sketch of the solid and label the indicated measures. Find the surface area of the solid.

1. Cylinder with a radius of 5 ft and a height of 8 ft .
2. Cube with an edge of 7 cm .
3. Cone with a radius of 10 mm and a slant height of 12 mm .
4. Square pyramid with a base edge of 18 in and a slant height of 12 in .
5. Rectangular prism with a length of 5 in , a width of 6 in , and a height of 8 in .
6. Cylinder with a diameter of 20 mm and a height of 12 mm .
7. Regular triangular pyramid with a base edge of 10 cm and a slant height of 13 cm .
8. Sphere with a diameter of 14 ft .
9. Square pyramid with a base edge of 8 in and a height of 3 in .
10. Cone with a radius of 12 m and a height of 5 m .

Make a sketch of the solid and label the indicated measures. Find the length of the indicated measure.
11. A cone has a surface area of $189 \pi \mathrm{ft}^{2}$ and a radius of 9 ft . Find the slant height of the cone.
12. A rectangular prism has a surface area of $556 \mathrm{~cm}^{2}$. The base has a length of 8 cm and a width of 10 cm . Find the height of the prism.
13. A square pyramid has a surface area of $689 \mathrm{~mm}^{2}$ and a base edge of 13 mm . Find the slant height of the pyramid.
14. A cylinder has a surface area of $78 \pi \mathrm{ft}^{2}$ and a radius of 3 ft . Find the height of the cylinder.
15. A cube has a surface area of $486 \mathrm{in}^{2}$. Find the length of an edge.
16. A sphere has a surface area of $1296 \pi \mathrm{in}^{2}$. Find the radius of the sphere.
17. A square pyramid has a surface area of $360 \mathrm{~m}^{2}$ and a base edge of 10 m . Find the height of the pyramid.
18. A cone has a surface area of $96 \pi \mathrm{~cm}^{2}$ and a diameter of 12 cm . Find the height of the cone.

