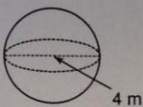
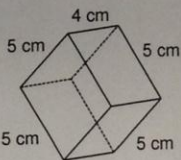
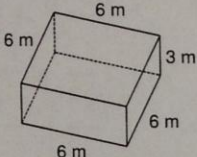


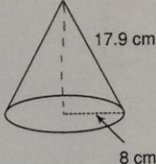
Surface Area of Solids

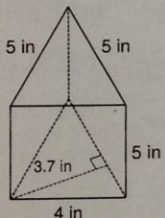
Find the surface area of each figure. Round to the nearest tenth.

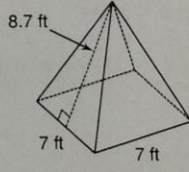
1)   $SA = 4\pi r^2$   
 $= 4(\pi)(2)^2$   
 $= \boxed{50.3 \text{ m}^2}$

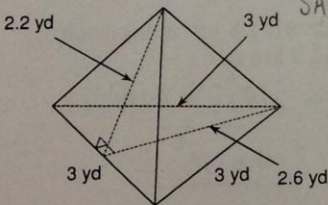
2)   $SA = 2wh + 2wL + 2hL$   
 $= 2(5)(5) + 2(5)(4) + 2(5)(4)$   
 $= \boxed{130 \text{ cm}^2}$

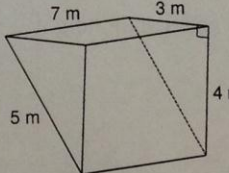
3)   $SA = 2wh + 2wL + 2hL$   
 $= 2(6)(6) + 2(6)(3) + 2(6)(3)$   
 $= \boxed{144 \text{ m}^2}$

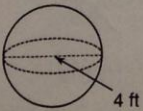
4)   $SA = \pi r(r + s)$   
 $= \pi(8)(8 + 17.9)$   
 $= \boxed{650.9 \text{ cm}^2}$

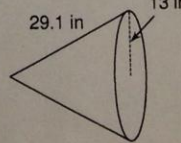
5)   $SA = 2(\text{top}) + \text{front} + 2(\text{slant})$   
 $= 2\left(\frac{5 \times 3.7}{2}\right) + 4(5) + 2(5)(5)$   
 $= \boxed{88.5 \text{ in}^2}$

6)   $SA = \text{bottom} + 4(\text{sides})$   
 $= (7)(7) + 4\left(\frac{7 \times 8.7}{2}\right)$   
 $= \boxed{170.8 \text{ ft}^2}$

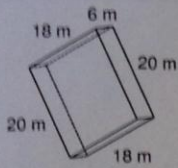
7)   $SA = \frac{3 \times 2.6}{2} + 3\left(\frac{3 \times 2.2}{2}\right)$   
 $= \boxed{13.8 \text{ yd}^2}$

8)   $SA = \text{top} + 2 \text{ sides} + \text{front} + \text{slant}$   
 $= (3)(7) + 2\left(\frac{3 \times 4}{2}\right) + (7)(4) + (7)(5)$   
 $= \boxed{96 \text{ m}^2}$

9)   $SA = 4\pi r^2$   
 $= \boxed{50.3 \text{ ft}^2}$

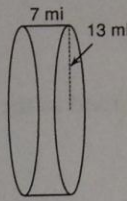
10)   $SA = \pi r(r + s)$   
 $= \pi(13)(13 + 29.1)$   
 $= \boxed{1719.4 \text{ in}^2}$

11)



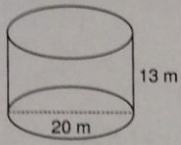
$$\begin{aligned}
 SA &= 2wh + 2wl + 2hl \\
 &= 2(18)(20) + 2(18)(6) + 2(20)(6) \\
 &= \boxed{1176 \text{ m}^2}
 \end{aligned}$$

12)



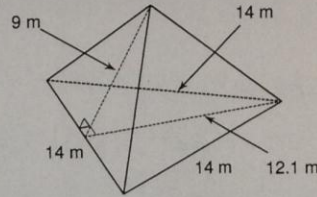
$$\begin{aligned}
 SA &= 2\pi r^2 + 2\pi rh \\
 &= 2\pi(7)^2 + 2\pi(7)(13) \\
 &= \boxed{1633.6 \text{ mi}^2}
 \end{aligned}$$

13)



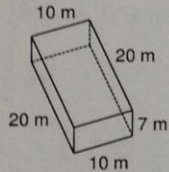
$$\begin{aligned}
 SA &= 2\pi r^2 + 2\pi rh \\
 &= 2\pi(10)^2 + 2\pi(10)(13) \\
 &= \boxed{1445.1 \text{ m}^2}
 \end{aligned}$$

14)



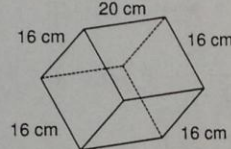
$$\begin{aligned}
 SA &= \text{base} + 3\text{sides} \\
 &= \frac{14 \times 14}{2} + 3\left(\frac{14 \times 12.1}{2}\right) \\
 &= \boxed{273.7 \text{ m}^2}
 \end{aligned}$$

15)



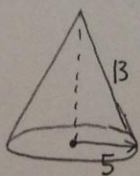
$$\begin{aligned}
 SA &= 2wL + 2wh + 2hL \\
 &= 2(10)(20) + 2(20)(7) + 2(10)(7) \\
 &= \boxed{820 \text{ m}^2}
 \end{aligned}$$

16)



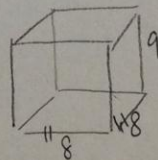
$$\begin{aligned}
 SA &= 2wL + 2wh + 2hL \\
 &= 2(20)(16) + 2(20)(16) + 2(16)(16) \\
 &= \boxed{1792 \text{ cm}^2}
 \end{aligned}$$

17) A cone with diameter 10 in and a slant height of 13 in.



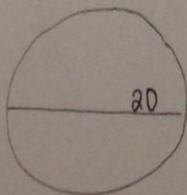
$$\begin{aligned}
 SA &= \pi r(r+s) \\
 &= \pi(5)(5+13) \\
 &= \boxed{282.7 \text{ in}^2}
 \end{aligned}$$

18) A square prism measuring 8 km along each edge of the base and 9 km tall.



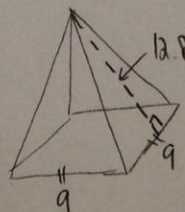
$$\begin{aligned}
 SA &= 2(8)(8) + 4(9)(8) \\
 &= \boxed{416 \text{ km}^2}
 \end{aligned}$$

19) A sphere with a diameter of 20 yd.



$$\begin{aligned}
 SA &= 4\pi r^2 \\
 &= 4\pi(10)^2 \\
 &= \boxed{1256.6 \text{ yd}^2}
 \end{aligned}$$

20) A square pyramid measuring 9 yd along the base with a slant height of 12.8 yd.



$$\begin{aligned}
 SA &= \text{base} + 4\text{sides} \\
 &= (9)(9) + 4\left(\frac{12.8 \times 9}{2}\right) \\
 &= \boxed{311.4 \text{ yd}^2}
 \end{aligned}$$