1. Find the lateral area and surface area of the pyramid
\[
\frac{5(6)}{2} \cdot 4 = 60 \text{ cm}^2
\]

2. Find the lateral area and surface area of the cone
\[
\frac{LA}{\pi r l} = \frac{\pi l^2 + \pi r l}{(2\pi l)(l)} \\
\pi (2)(12) \quad \pi (2)^2 + \pi (2)(\sqrt{29}) \\
(2\pi \sqrt{29}) \cdot 12^2 \\
\approx 33.84 \text{ ft}^2
\]
\[
\approx 46.4 \text{ ft}^2
\]

Find the surface area of each pyramid to the nearest hundredth.
3. 11 in.
\[
12(12) + \frac{12(11)}{2} \cdot 4 = 144 + 264 = 408 \text{ in}^2
\]

4. 8 in.
\[
\frac{1}{2}(2\sqrt{3})(24) + \frac{4(8)}{2} \cdot 4 = 24\sqrt{3} + 96 = 137.57 \text{ in}^2
\]

5. Find the lateral area of each pyramid to the nearest hundredth.
\[
8^2 + (5\sqrt{3})^2 = l^2 \\
64 + 75 = l^2 \\
139 = l^2 \\
\sqrt{139} = l
\]
\[
LA = \frac{10(\sqrt{139})}{2} \cdot 4 = 5\sqrt{139} \cdot 4 = 30\sqrt{139} \approx 353.69 \text{ cm}^2
\]
Find the lateral area of each cone to the nearest hundredth.

7. \[ \pi (3)(5) \]
   \[ 15\pi \]
   \[ \approx 47.12 \text{ cm}^2 \]

Find the surface area of each cone in terms of \( \pi \)

8. \[ \pi (6)^2 + \pi (6)(18) \]
   \[ 36\pi + 108\pi \]
   \[ 144\pi \approx 452.39 \text{ cm}^2 \]

10. Find the surface area of the composite figure to the nearest hundredth of a ft.

11. The y-axis \( y=5 \)

Suppose you revolve the plane region completely about the given line to sweep out a solid of revolution. Describe the solid. Then find its surface area in terms of \( \pi \).

12. The x-axis \( x=5 \)