## Surface Area and Volume of Conical Frustums (E)

Calculate the surface area and volume for each conical frustum.
Surface Area $=\pi\left(r_{1}+r_{2}\right) \sqrt{\left(r_{1}-r_{2}\right)^{2}+h^{2}}+\pi r_{1}{ }^{2}+\pi r_{2}{ }^{2} \quad$ Volume $=\frac{\pi}{3} h\left(r_{1}{ }^{2}+r_{2}{ }^{2}+r_{1} r_{2}\right)$
1.

2.

3.

4.


## Surface Area and Volume of Conical Frustums (E) Answers

Calculate the surface area and volume for each conical frustum.
Surface Area $=\pi\left(r_{1}+r_{2}\right) \sqrt{\left(r_{1}-r_{2}\right)^{2}+h^{2}}+\pi r_{1}{ }^{2}+\pi r_{2}{ }^{2} \quad$ Volume $=\frac{\pi}{3} h\left(r_{1}{ }^{2}+r_{2}{ }^{2}+r_{1} r_{2}\right)$
1.


Surface Area: 4554.18 in $^{2}$
Volume: 19,433.01 in ${ }^{3}$
2.

4.


