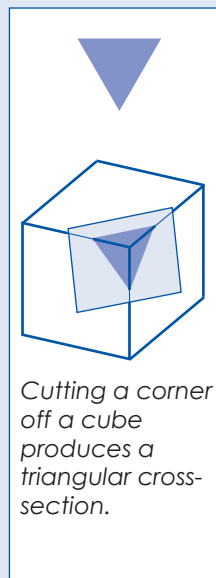
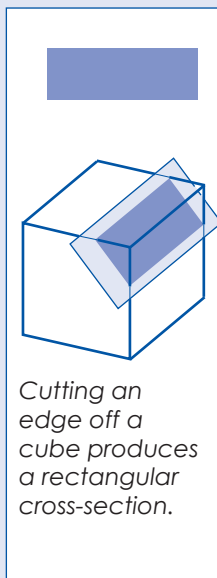
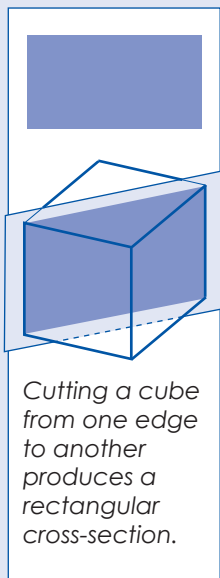
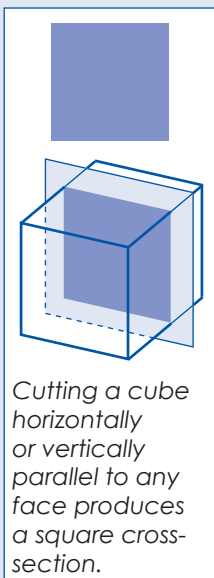


Cross-Sections and Conic Sections

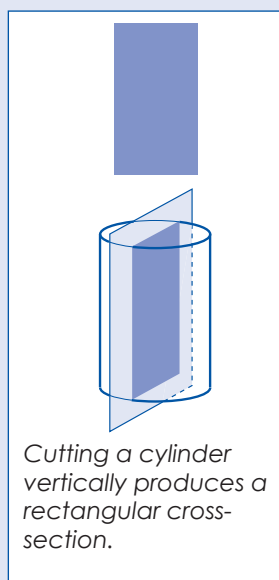
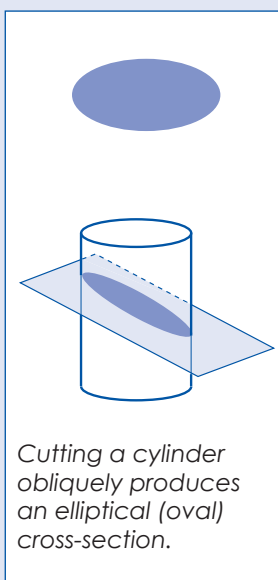
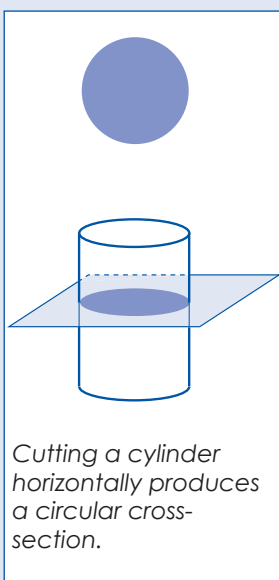
Cross-sections refer to the plane regions resulting from planar cuts through 3-D objects.

Some Cross-Sections of Cubes



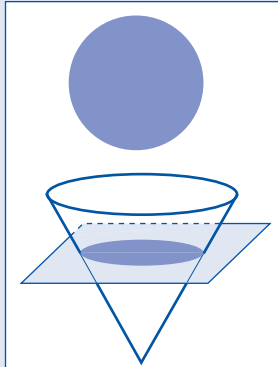
There are many other resulting cross sections of a cube, such as trapezoids and hexagons.

Some Cross-Sections of Cylinders

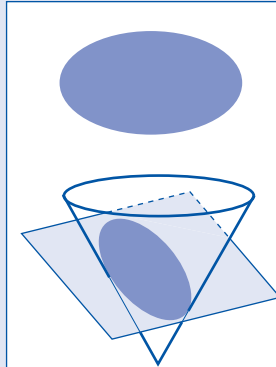


Cross-Sections and Conic Sections

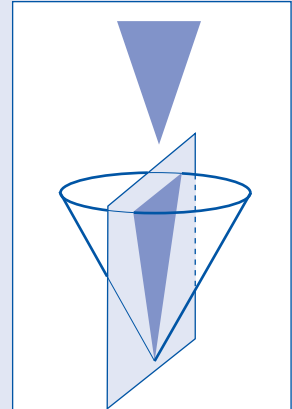
Cross-Sections of Cones (Conic Sections)



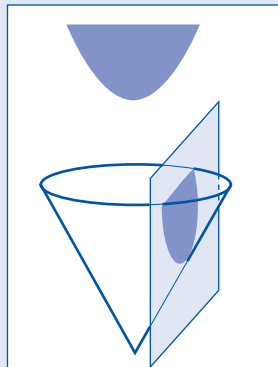
Cutting a cone horizontally produces a circular cross-section.



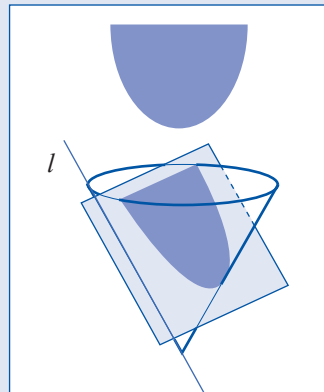
Cutting a cone obliquely produces an elliptical (oval) cross-section.



Cutting a cone vertically through the center produces an isosceles triangular cross-section.



Cutting a cone vertically but not through the center produces half a hyperbola cross-section.



Cutting a cone diagonally and parallel to line l on its curved surface produces a parabola cross-section.