Cross Sections

Notes:

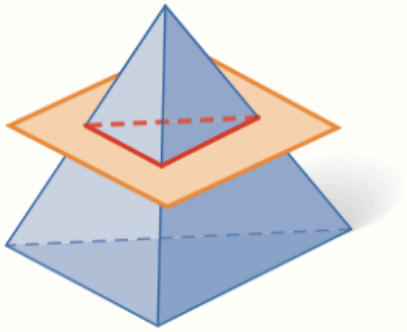
A **cross section** is the intersection of a three-dimensional figure and a plane.

In the examples below, the blue shape

Describing Cross Sections of Three-Dimensional Figures

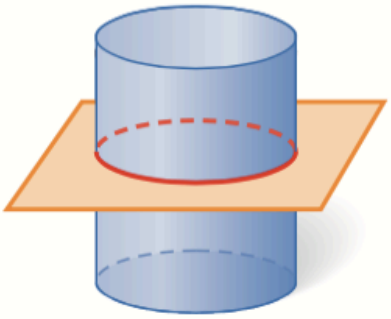
Describe each cross section.

A



The cross section is a triangle.

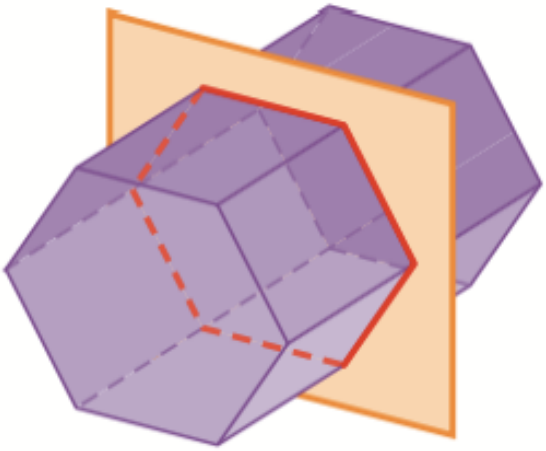
B



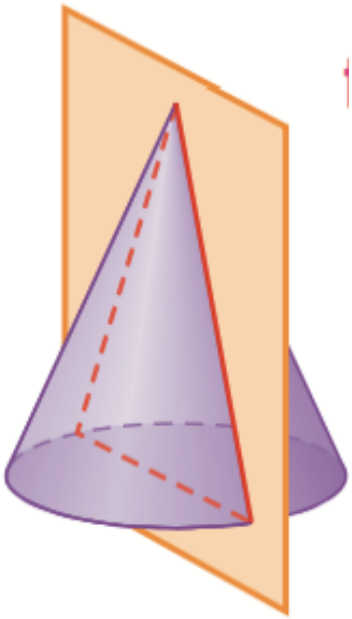
The cross section is a circle.

Describe the cross section of these figures: (answers on next page)

1.



2.



1. Hexagon 2. Triangle

Sometimes you might be asked how you would cut a cross section to get a specific shape. So you have to describe how you would have the plane intersect with that shape.

A chef is slicing a cube-shaped watermelon for a buffet. How can the chef cut the watermelon to make a slice of each shape?

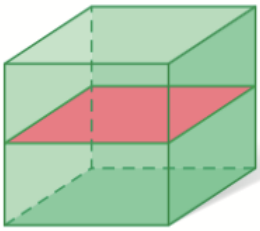
A a square

B a hexagon

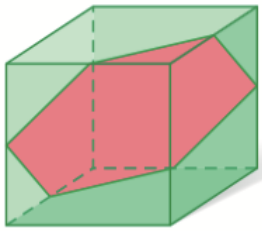
Fun Fact:

In some countries fruits are actually grown in strange shapes, like a cube!

These describe how you would cut the cube.



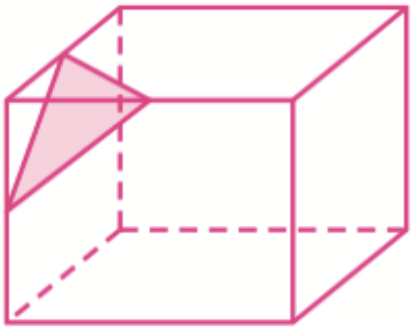
Cut parallel to the bases.



Cut through the midpoints

What about make a triangular face? (Answer on next page)

Answer: Cut through the midpoints of 3 edges that meet at one vertex of the cube.



The assignment is posted in Teams.

“Cross Sections”

Show all your work and then upload your work to the Teams assignment.