



Geometry Journey Video Series

Program #1

Geometry World

**Satellite Broadcasting
VHS
and Internet/Intranet Streaming**



Topic

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Program Description

This video is a general introduction to all aspects of geometry, including plane geometry, solid geometry and non-Euclidean geometry. By showing the interesting and exciting aspects of geometry that are all around us, this video will help first-time geometry students develop an appreciation for the ever-present beauty of geometry and wonders of geometric forms. The goal is to stimulate the students to pursue the subject further.

This program is the #1 episode in the fifteen 15-minute Geometry Journey Series.

Synopsis

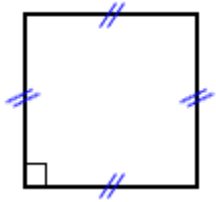
This program will cover the following topics:

1. Geometry around Us
2. Building Blocks of Geometry
3. Introduction to Plane Geometry
4. Introduction to Solid Geometry
5. Introduction to Non-Euclidean Geometry

Fill in the blanks.

- 1) The motion of a point produces _____.
- 2) The motion of a line produces _____.

Please name each of the following geometric shapes.



1. _____



2. _____



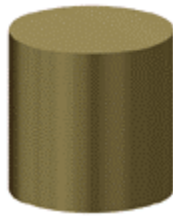
3. _____



4. _____



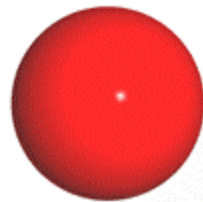
5. _____



6. _____



7. _____



8. _____

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Discussion Questions

Question: What is fractal geometry?

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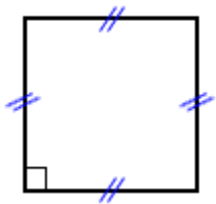
Answers to the Student Worksheet

Fill in the blanks.

1) The motion of a point produces a line.

2) The motion of a line produces a plane.

Please name each of the following geometric shapes.



1. Square



2. Rectangle



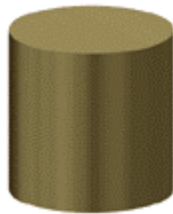
3. Triangle



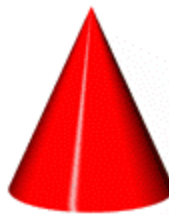
4. Circle



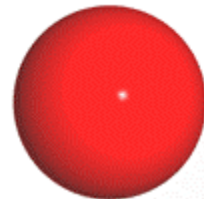
5. Cube



6. Cylinder



7. Cone



8. Sphere

Question: What is fractal geometry?

Hint: Fractal geometry is a branch of non-Euclidean geometry that we can use to describe many everyday objects such as clouds, coastlines, mountain ranges, rivers and trees. A fractal is a geometric shape that consists of an identical motif repeating itself on an ever-reduced scale. The following series of pictures have shown how a motif can be repeated to generate a tree.

