

Name:

Date:

Pts:

Lesson 10: Special Topics in Geometry – Written Summary

For this lesson you will need a straightedge and a compass.

You will study sections 1 through 5 on the Boxer CD, and complete this summary as you go.

The remaining sections 6 through 10 are fascinating, but are not required for this course. Explore them as desired!

Frame

Activity

10

Record the Five Postulates of Euclidean Geometry here:

1.

2.

3.

4.

5.

16

Study the given steps. Use a compass and straightedge to draw an equilateral triangle here:

Frame

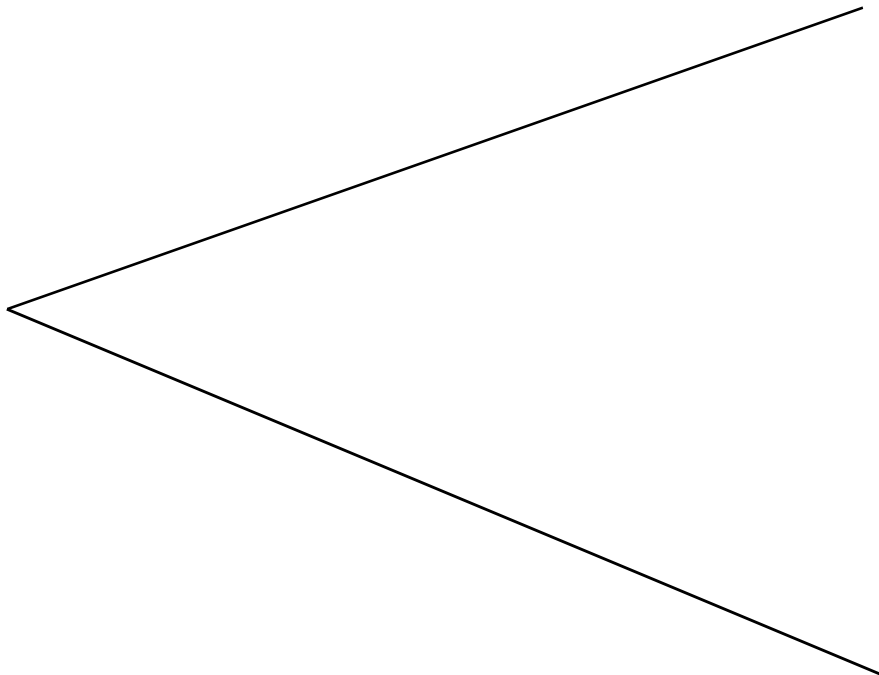
Activity

19

Use a straightedge and compass to construct a regular hexagon here:

21

Use a straightedge and compass to bisect this angle:

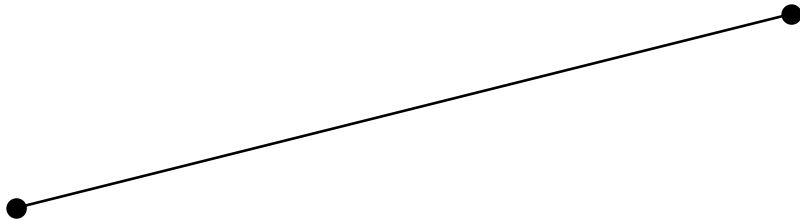


Frame

Activity

24

Use a straightedge and compass to construct a perpendicular bisector on this line segment:



32

Study the given steps. Use a folding technique to locate the midpoint of this line segment:

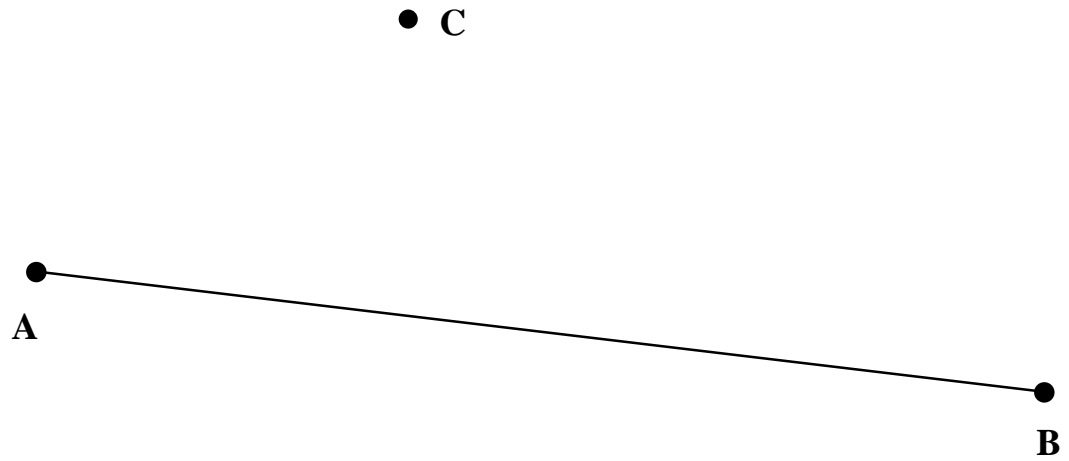


Frame

Activity

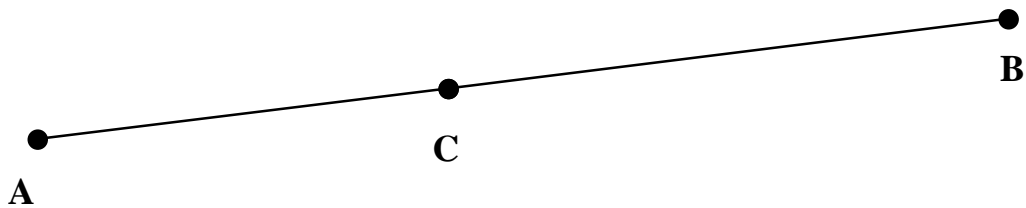
34

Use a folding technique to draw a perpendicular line segment from point **C** to the given line segment **AB**:



36

Use a folding technique to draw a line segment through point **C** which is perpendicular to line segment **AB**:

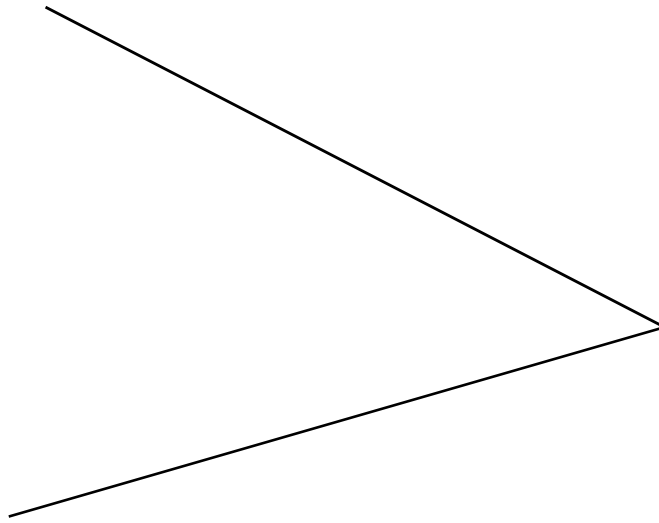


Frame

Activity

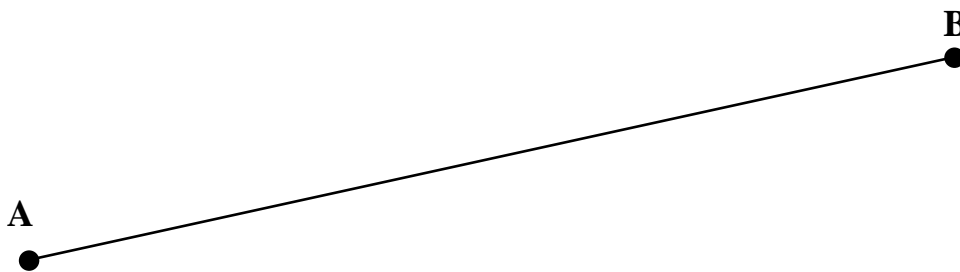
38

Use a folding technique to bisect this angle:



40

Use a folding technique to construct a line segment through point **C** which is parallel to the given line segment **AB**:



Frame**Definition, Notes**

46 Reflectional Symmetry

47 Line of Symmetry

55 Rotational Symmetry

56 Point of Symmetry

70 Tessellation

71 Regular Tessellation

77 List the regular polygons that will tessellate:

80 Draw one example of a tessellation pattern. Look around you for an interesting pattern, or design one of your own: