perfect circle champ

Lesson # 28 - The Circle

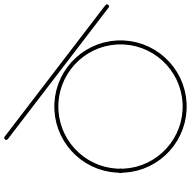
crop circles

Definitions

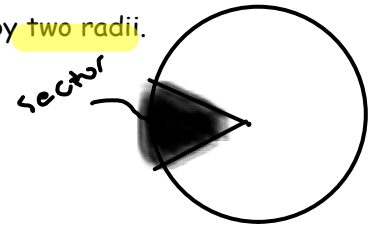
Circle a perfectly round shape with each point in the circle an equal distance from a single inner point called the center.

Disc is an area or a plane which includes the circle and its inner area.

Tangent is a straight line having a single point of contact with a circle.



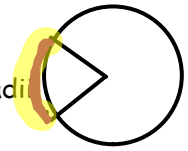
Sector a portion of a disc defined by two radii.



Central Angle an angle formed by 2 radii.

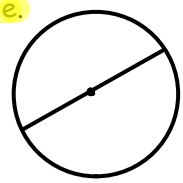
Chord a segment joining any two points on a circle.

Arc a part of a circle defined by a chord or two radii



Diameter a chord passing through the center of a circle.

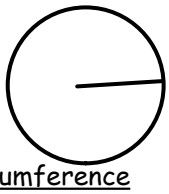
2 times the radius



Radius line segment with one end point at the center of the circle and the other at any point along the circle.

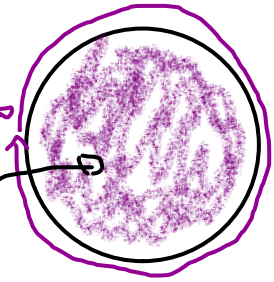
1/2 the diameter

Radii ~ plural of radius



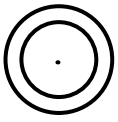
Circumference Perimeter or length around a circle

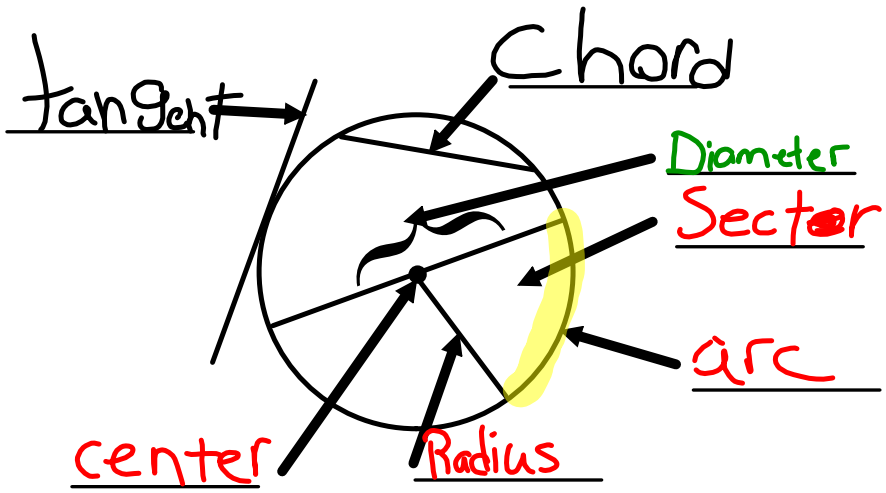
Area of disc Measure of the surface of a circle.

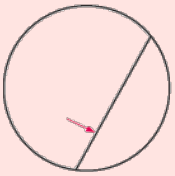


please add .....

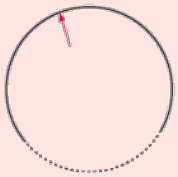
Concentric having a common center



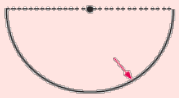

chord
tangent
Diameter
Sector
arc
center
Radius



a chord



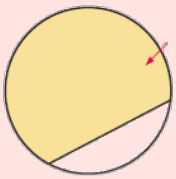
a major arc



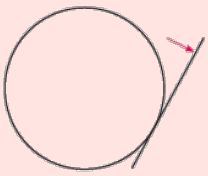
a semi-circle

Match the part of the figure indicated to the phrase below.

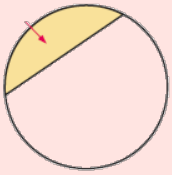
Chapter 18 p.353



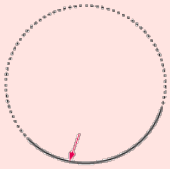
a major segment



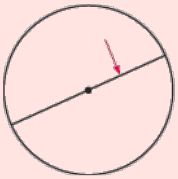
a tangent



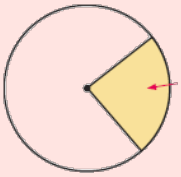
a minor segment



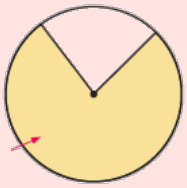
a minor arc



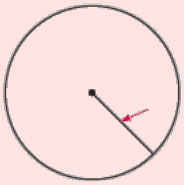
a diameter



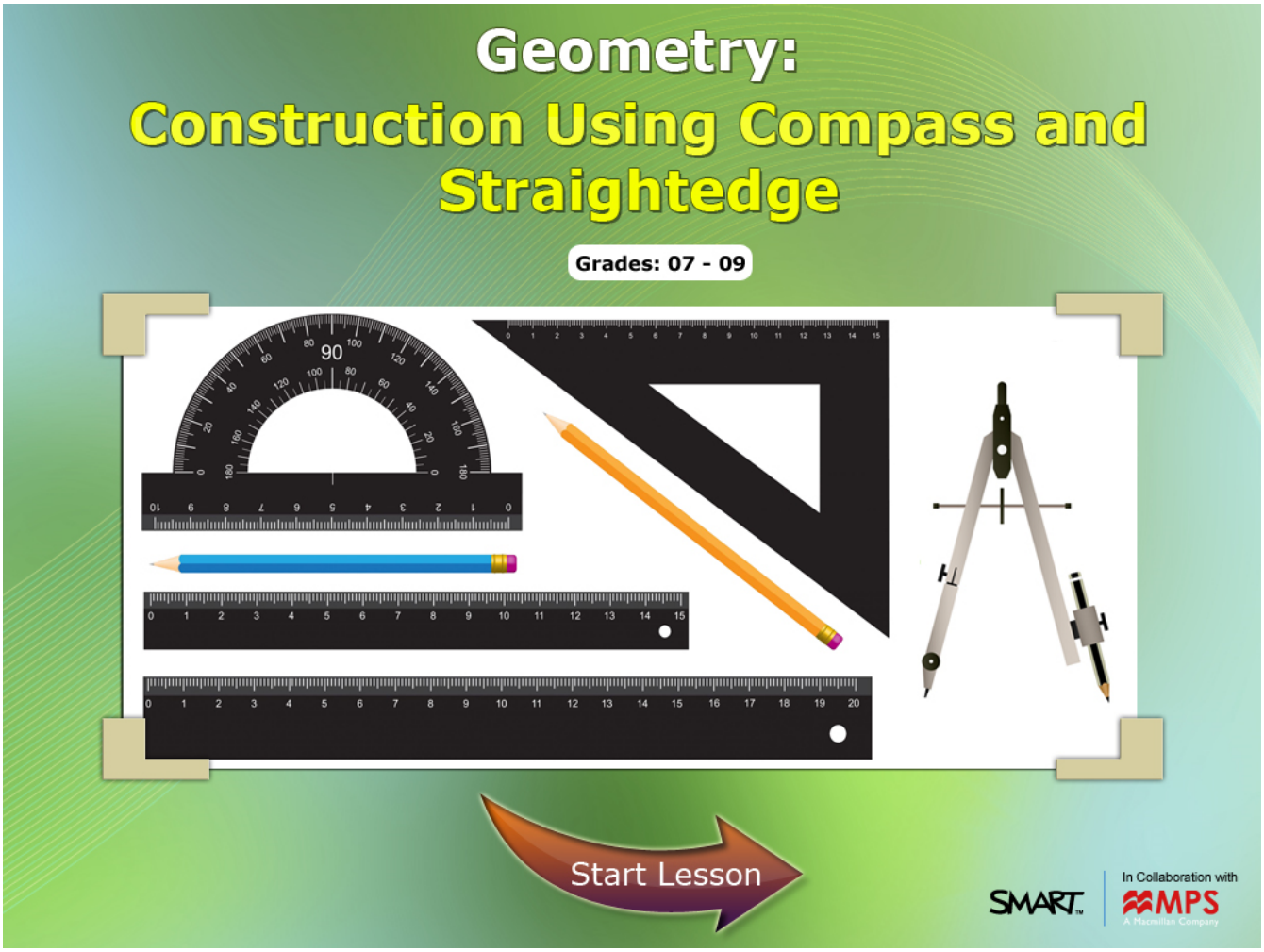
a minor sector

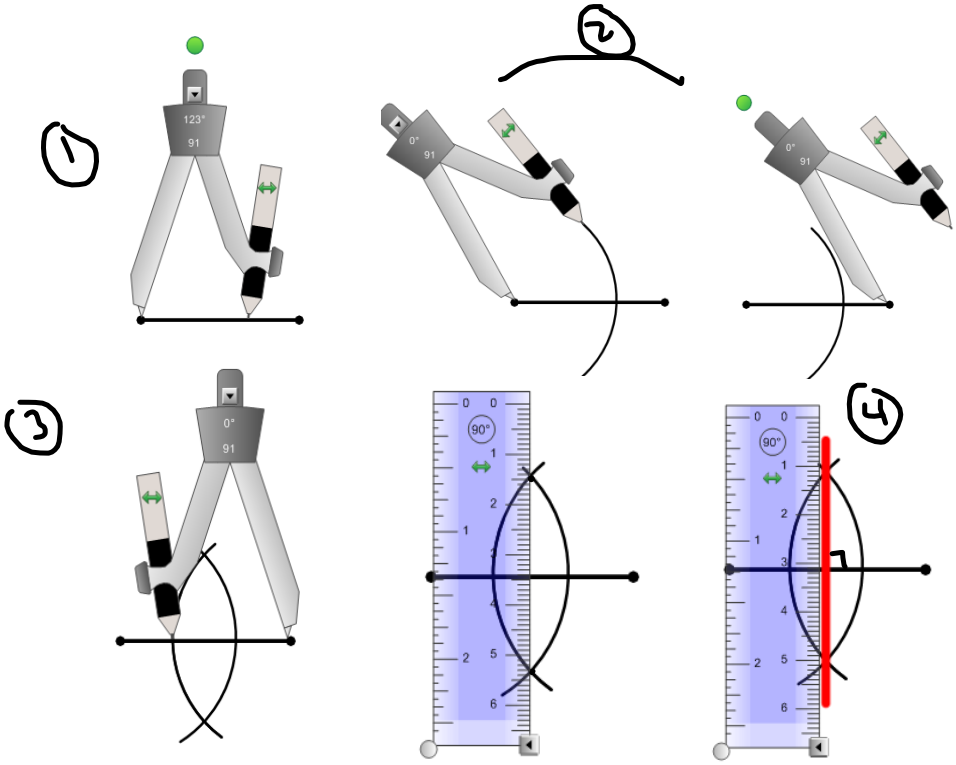


a major sector



a radius


Geometry:
Construction Using Compass and Straightedge
Grades: 07 - 09
Start Lesson
In Collaboration with
MPS


1
2
3
4
123°
91
0°
91
90°

Perpendicular Bisector

Teacher's Notes 1

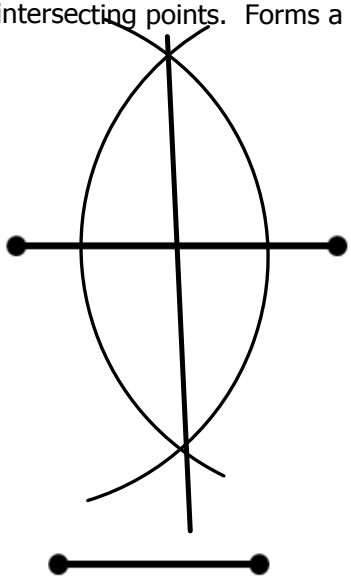
Teacher's Notes 2

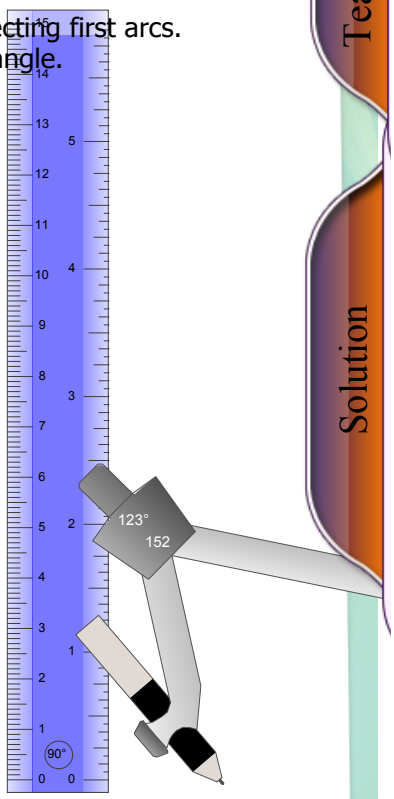
Solution

In order to find a perpendicular bisector:

Steps to take

1. Open compass a little wider than half the line.
2. Draw 2 arcs, one on each side of the line.
3. Do step 2 again from the other end of the line. Intersecting first arcs.
4. Join the two intersecting points. Forms a perfect 90°angle.





Activity

Draw a perpendicular bisector for the given line segment.

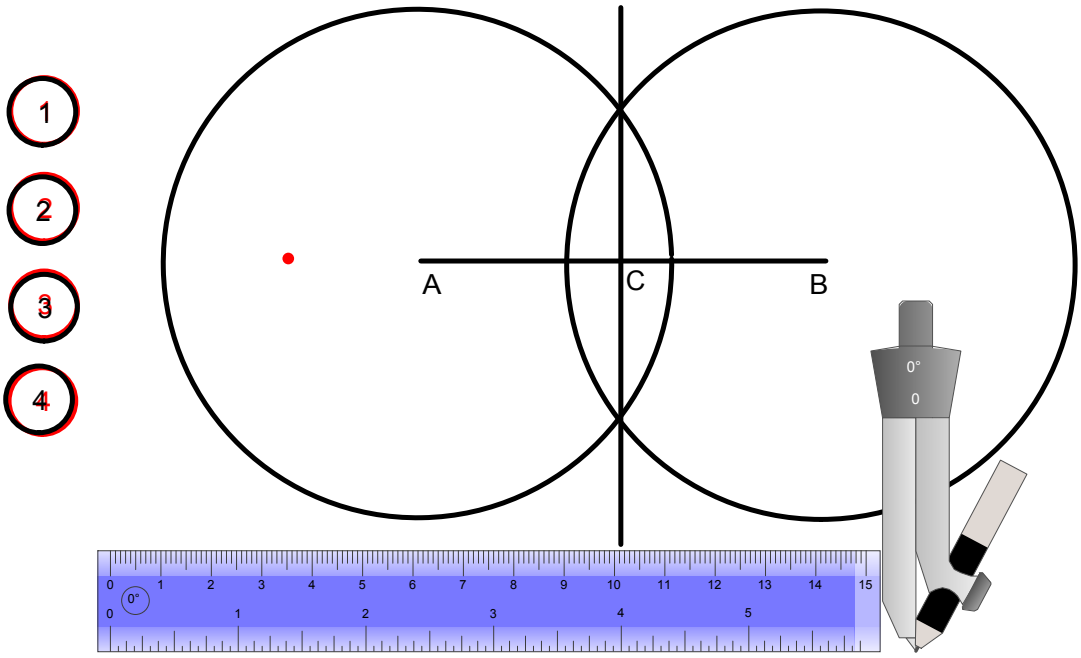
Teacher's Notes

1

2

3

4



The Circle

L.28

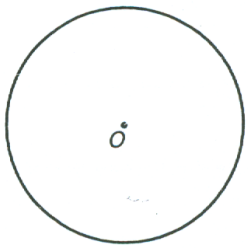
1. What is the diameter of a circle if the radius measures:

a) 5 cm? _____ ***b)*** 0.9 dm? _____ ***c)*** 32 mm? _____

2. What is the radius of a circle if the diameter measures:

a) 4 cm? _____ ***b)*** 6.2 dm? _____ ***c)*** 50 mm? _____

3. In this circle with centre *O*, draw:



a) radius *OA*.

b) chord *AB*.

c) diameter *BC*.

4. Draw a circle with a radius of 2.5cm.
Draw and label the following parts:

1. radius of 2.5 cm
2. diameter
3. chord
4. central angle
5. arc
6. sector

5. Construct the perpendicular bisector of each of the following line segments. Then draw 4 other line segments and construct the perpendicular bisectors

Attachments

Construct Perpendicular Bisector.asf

Parts of a Circle.notebook