


perfect circle
champ

Lesson # 28 - The Circle

crop circles

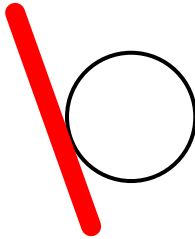
Definitions

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.

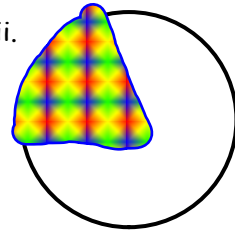


Tangent is a straight line having a single point of contact with a circle.

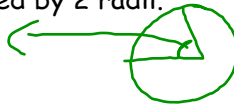


Sector a portion of a disc defined by two radii.

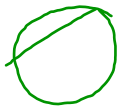
Pizza



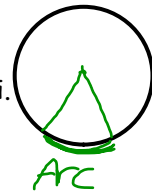
Central Angle an angle formed by 2 radii.



Chord a segment joining any two points on a circle.

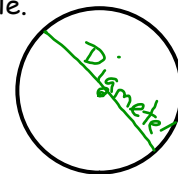


Arc a part of a circle defined by a chord or two radii.



Diameter a chord passing through the center of a circle.

2 times the radius



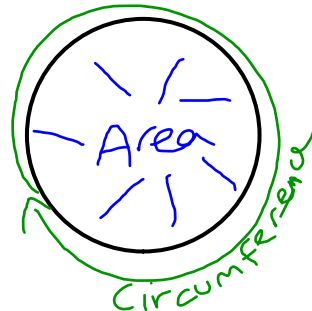
Radius line segment with one end point at the center of the circle and the other at any point along the circle.



1/2 the diameter
Radii ~ plural of radius

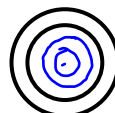
Circumference Perimeter or length around a circle

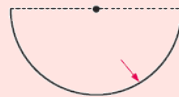
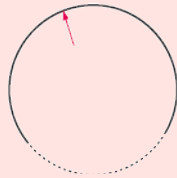
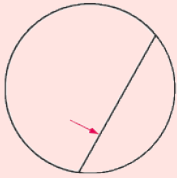
Area of disc Measure of the surface of a circle.



please add

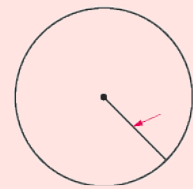
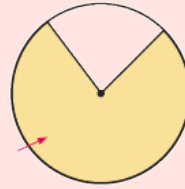
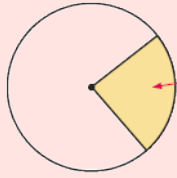
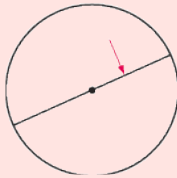
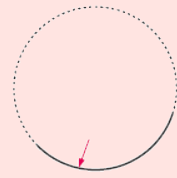
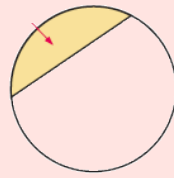
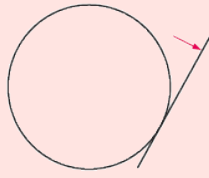
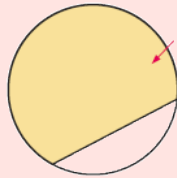
Concentric having a common center





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

Chapter 18 p.353



a semi-circle
a diameter
a major sector

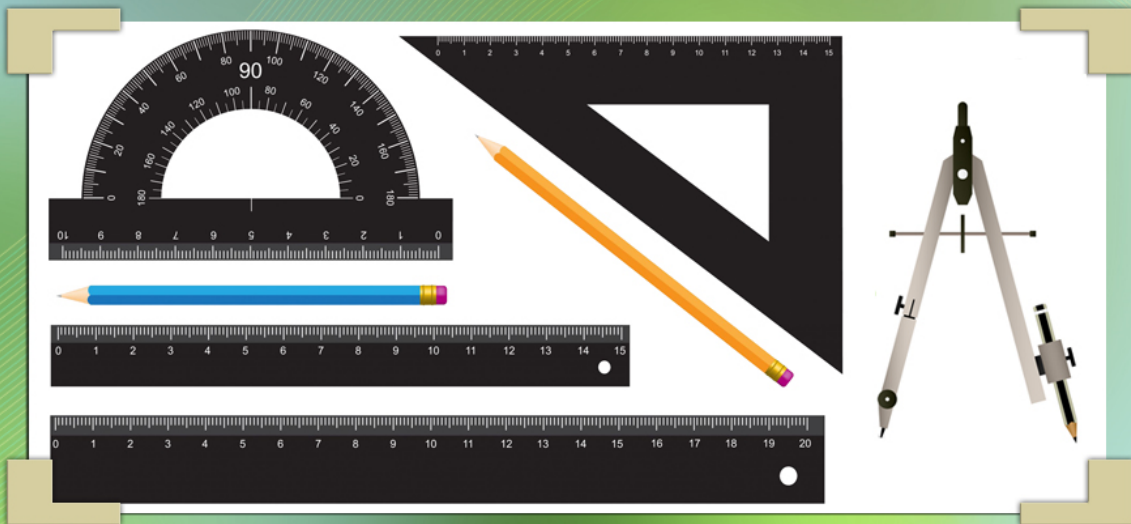
a radius
a chord
a minor sector

a major arc
a minor segment
a tangent

a minor arc
a major segment

Geometry: Construction Using Compass and Straightedge

Grades: 07 - 09



Start Lesson

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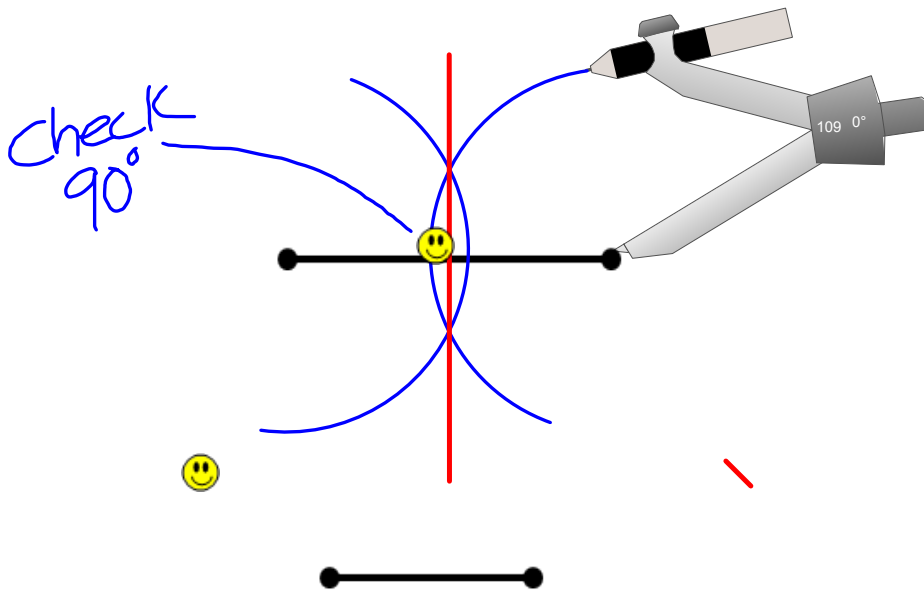
Perpendicular Bisector



In order to find a perpendicular bisector:

Steps to take

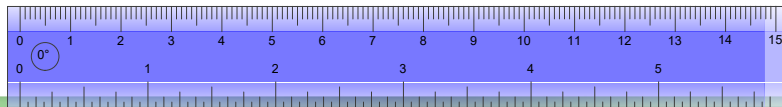
1. Open compass a little wider than half the line.
2. Draw 2 arcs, one on each side of the line.
3. Do step 2 again from the other end of the line. Intersecting first arcs.
4. Join the two intersecting points. Forms a perfect 90° angle.



Teacher's Notes 1

Teacher's Notes 2

Solution



Activity

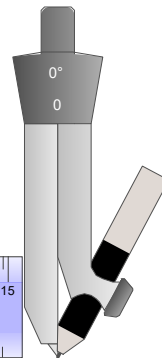
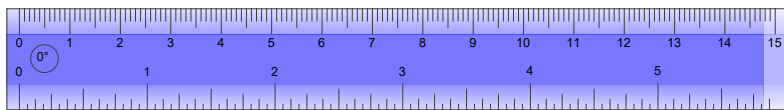
Draw a perpendicular bisector for the given line segment.

Teacher's Notes

- 1
- 2
- 3
- 4



- 1
- 2
- 3
- 4



The Circle

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

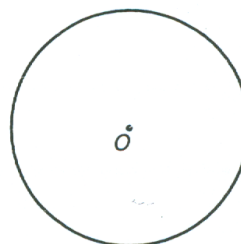
- a) 5 cm? _____ b) 0.9 dm? _____ c) 32 mm? _____

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