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Modified In-School Off-School Approach Modules (MISOSA)
Distance Education for Elementary Schools
SELF-INSTRUCTIONAL MATERIALS



CIRCLE



Department of Education
BUREAU OF ELEMENTARY EDUCATION
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Pasig City

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by the Learning Resource Management and Development System (LRMDS),
DepEd - Division of Negros Occidental
under the Strengthening the Implementation of Basic Education
in Selected Provinces in the Visayas (STRIVE).

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CIRCLE

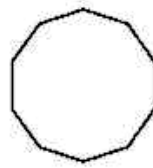
Objective: Visualize circle
Identify the parts of a circle



Match the figures with their name.

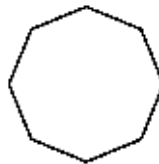
1. pentagon

a.



2. octagon

b.



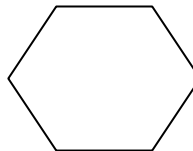
3. decagon

c.



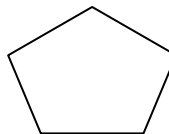
4. hexagon


d.



5. nonagon

e.





Study and Learn

Get a clean sheet of paper, a ruler and a pencil. Do this activity.

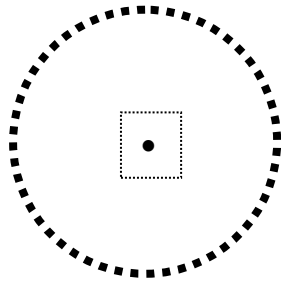
1. Mark point A in your paper.

•
A

2. Using your ruler, from Point A, mark another point 30 cm apart from it.

• —→ 30 cm ←— •
A

3. Continue marking other points with the same measure apart from Point A until you were able to finish a figure like the one below:



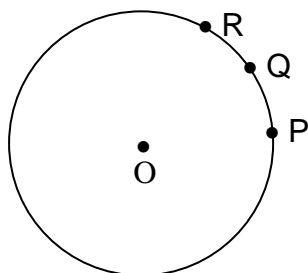
What figure looks like the one above? (*Yes, it looks like a circle.*)

What can you say about the distance from the centerpoint to the other points?
They are the same.

What is the common measurement?
30 cm

Supposed we make one point less than 30 or more, can we form a circle?
Correct. We cannot form a circle.

Let us verify your discovery by using another circle.



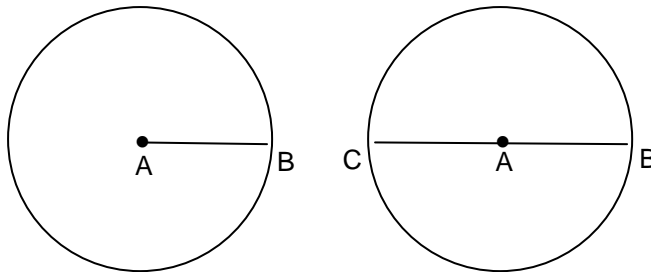


Using your ruler measure the distance from Point O to Point P.

The distance is ___ cm. How about Point Q? Point R?

Supposed we put more points along the edge, will you arrive at the same measurement?

Circle has two parts. Look at the figure below.

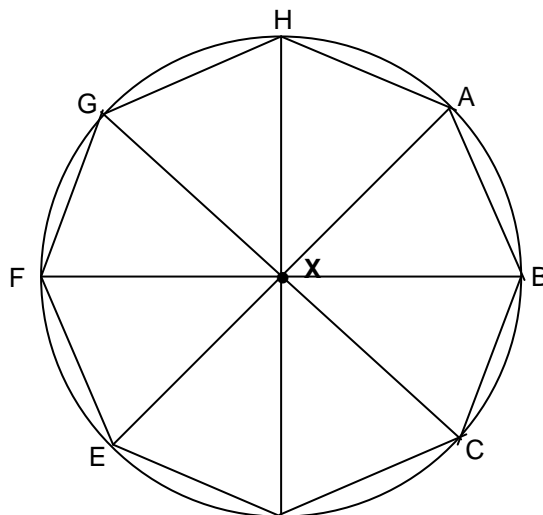


A segment from the center to any point on the circle is called radius. Which figure shows radius? Correct! Figure A. **Line segment \overline{AB} is the radius.**

A segment passing through the center that connects two points on the circle is the diameter. What is the diameter of the given circle above? **Line segment \overline{CB} is the diameter.**



Look at the circle below. Answer the questions that follow.



1. The plural of radius is radii. Name radii of circle x other than \overline{XA} .





2. How many radii does the circle above have?
3. Name two diameters of circle x other than \overline{FB} .
4. How many diameters does the circle above have?
5. Is the length of the radius of a circle always half the length of any diameter of that circle? Why?



Wrap Up

A circle is the set of points in a plane that are of the same distance from a given point, the center. You name a circle by its center.

A radius is a segment that has one endpoint at the center of the circle and the other endpoint on the circle.

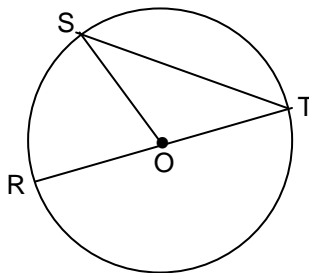
A diameter is a segment that passes through the center of a circle and has both endpoints on the circle.



On Your Own

Name each of the following for Circle O.

1. three radii
2. a diameter



3. If the diameter of Circle O is 6 cm, what is the radius?





Check your answer with the answer key.

If you get...

4-5 Excellent! You may now proceed to the next lesson.

3 You need to review the processes you missed.

0-2 You need to repeat the whole process. Ask your teacher or elder to help you.





Key to Correction
CIRCLE

REVIEW

- 1) e
- 2) b
- 3) a
- 4) d
- 5) c

TRY THESE

- 1) \overline{XB} , \overline{XC} , \overline{XD} , \overline{XE} , \overline{XF} , \overline{XG} , \overline{XH}
- 2) 8
- 3) \overline{HD} , \overline{GC} , \overline{EA}
- 4) 4
- 5) Yes

ON YOUR OWN

- 1) \overline{OT} , \overline{OR} , \overline{OS}
- 2) \overline{RT}
- 3) 3 cm

