Fill out the table. Use the diagrams to identify examples in the third and fourth columns.

P

Q

M

X

L

J

K

N

D

C

E

Y

B

F

A

|  |  |  |  |
| --- | --- | --- | --- |
| **Part** | **Description** | **Symbol in Circle X** | **Symbol in Circle Y** |
| Name |  |  |  |
| Radius |  |  |  |
| Diameter |  |  |  |
| Chord |  |  |  |
| Secant Line |  |  |  |
| Tangent Line |  |  |  |
| Point of Tangency |  |  |  |
| Minor Arc |  |  |  |
| Major Arc |  |  |  |
| Semi-Circle |  |  |  |

**Sketch Circle O.** Then sketch each of the following on Circle O.  
--Radius,   
--Diameter   
--Chord   
-- tangent to Circle O at point X  
-- secant to Circle O.

Tangent Line Theorem:

Line is tangent to circle C at point P   
if and only if  
 forms a right angle with the radius .

C

P

Q

To test if is tangent to circle C at point P, use Pythagorean Theorem.

C

P

Q

10

8

6

C

P

Q

6

4

5

C

P

Q

11

30

61

Given: O

L

O

M

N

1. Name three different minor arcs. \_\_\_\_\_\_\_, \_\_\_\_\_\_\_, and \_\_\_\_\_\_\_.
2. Name three different major arcs. \_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_.

Given: R, find the measure of each indicated arc.  
a.) m = \_\_\_\_\_\_ b.) x= \_\_\_\_\_\_ c.) m=\_\_\_\_\_ d.) m=\_\_\_\_\_  
 Given: m=23o Given: m = 190o

190o

I

T

N

H

G

I

J

J

A

M

R

60o

X

Y

Z

W

(5x-10)o

M

(4x)o