*Use the diagram for problems 1-3.*

1. Find measure of arc AB.
2. What is the circumference if the radius is 5.
3. Find the length of arc ACB.
4. Write the equation of a circle with radius 5 centered at the point (-2,-3).



1. If ABCD has height 8 and width 15, what is the radius of the

circle.

*Use the diagram to answer 6-7.*

1. If $\overbar{CA}=2x-1$ and $\overbar{CB}=4x-5$, find the radius of the circle

if $\overbar{OB}=3x-1$.

1. If $m\hat{AB}=60°$, find the measure of angle C (or angle ACB).



1. If AB = 24, the radius of O = 5 and the radius of P = 15

find PO.



1. Find $m\hat{YX.}$
2. Find, to the nearest centimeter, the circumference of a circle in which a 24 cm chord

is 5 cm from the center.

1. The centers of two circles with radii 3 and 5 are 10 units apart. Find the length of a common internal tangent.



1. Find the length of segment ZW based on the image shown:

Z

W

Y

X

80

1. Find the measure of angle X if the ratio

of arc YW to arc WZ is 3:4.

1. M is the midpoint of arc AB. Find the measure

x+7

3x-31

4x-14

A

M

B

C

D

 of arc CD (all measures are in degrees).

1. Find the measure of angle P (all measures are in degrees).
2.  Solve for x.
3. Solve for x.