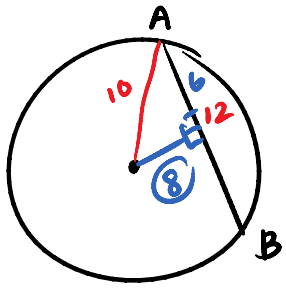
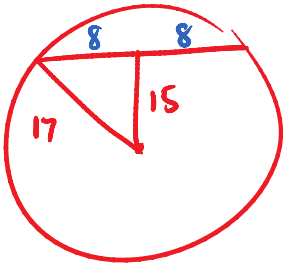
Section 10.1
p. 443: 5, 6, 11, 12, 14, 17, 22, 23

#5



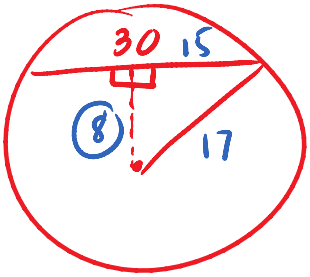
8mm

#6 Find the length of a chord that is 15 cm from the center of a circle with a radius of 17 cm



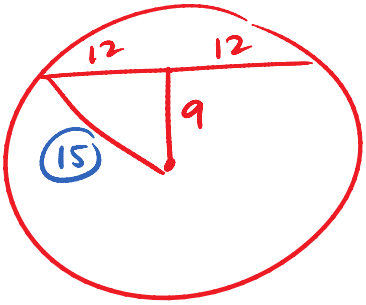
16cm

#11 Find the distance from the center of a circle to a chord 30m long if the diameter of the circle is 34m



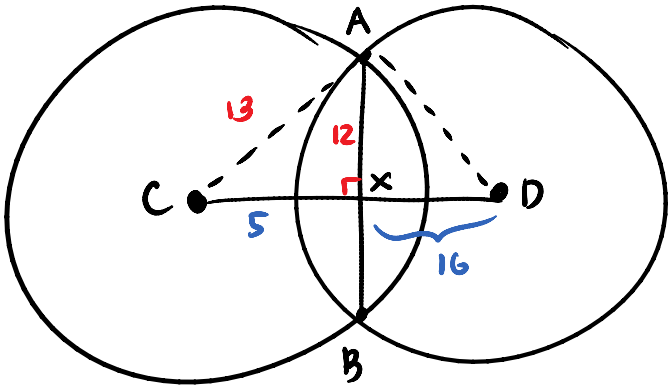
8m

#12 Find the radius of a circle if a 24cm chord is 9cm from the center



15cm

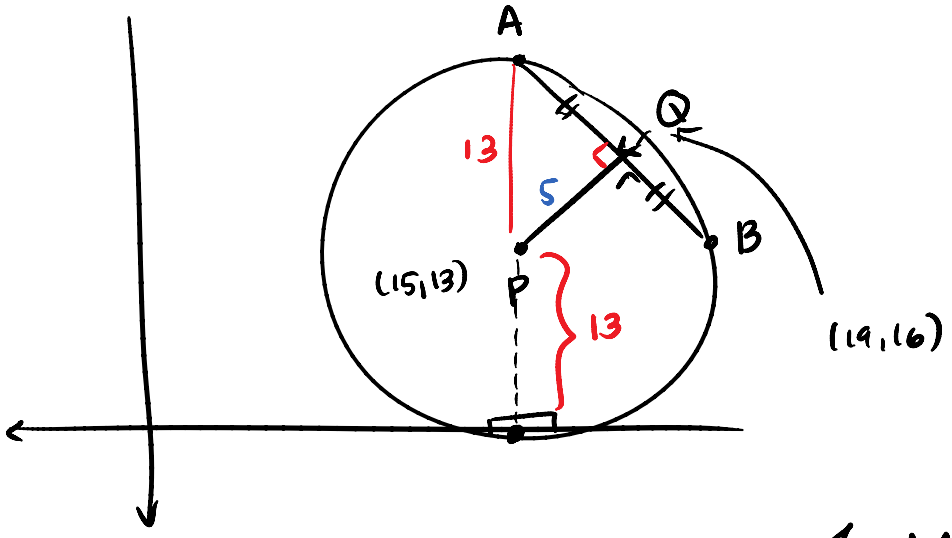
#14 Two circles intersect and have a common chord 24cm long. The centers of the circles are 21 cm apart. The radius of one circle is 13 cm. Find the radius of the other circle.



CX = 25

20 = AD

#17



a. Find radius

13

b. Find PQ

$d = \sqrt{(19-15)^2 + (16-13)^2}$

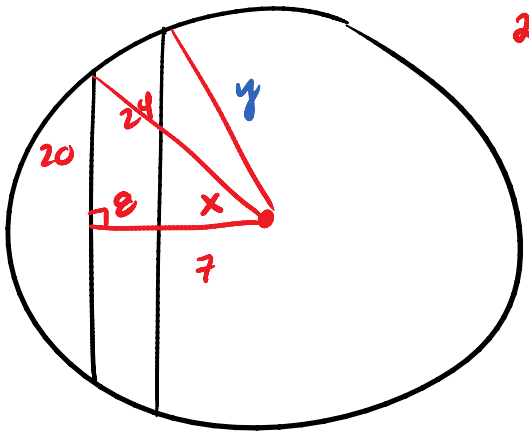
$d = \sqrt{4^2 + 3^2}$

$d = \sqrt{25}$

$d = 5$

Find AB 24

#22 Find the radius of a circle in which a 48-cm chord is 8 cm closer to the center than a 40 cm chord



$20^2 + (x+8)^2 = y^2$

$x^2 + 24^2 = y^2$

$20^2 + (x+8)^2 = x^2 + 24^2$

$400 + x^2 + 16x + 64 = x^2 + 576$

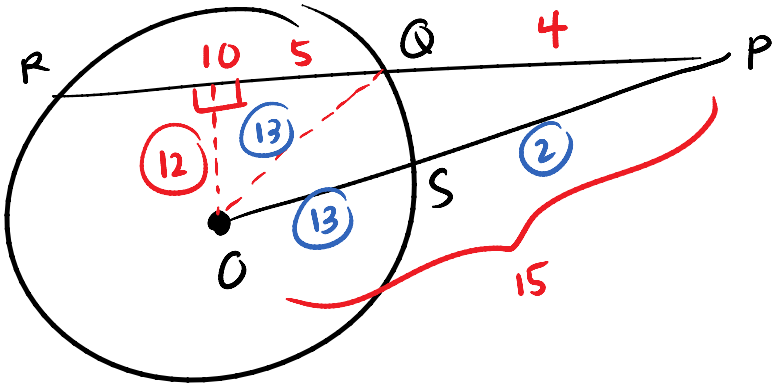
$464 + 16x = 576$

$16x = 112$

$x = 7$

$\boxed{25\text{cm}}$ 7, 24, 25

#23



$\boxed{2}$