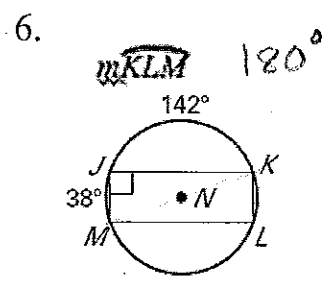
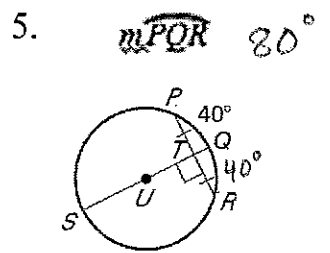
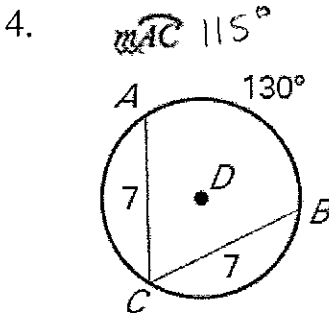
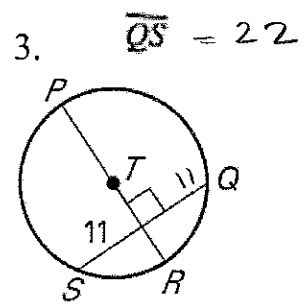
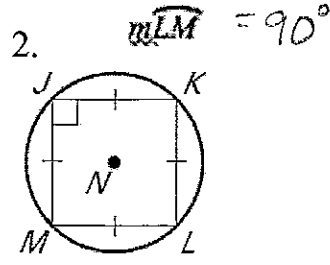
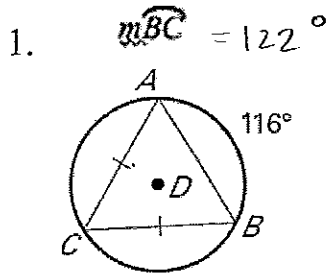


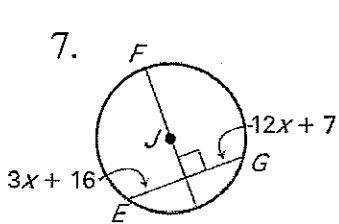
Name: Key

Secondary Math II
Unit 11 Day 3 Home Work

Find the measure of the given arc or chord.



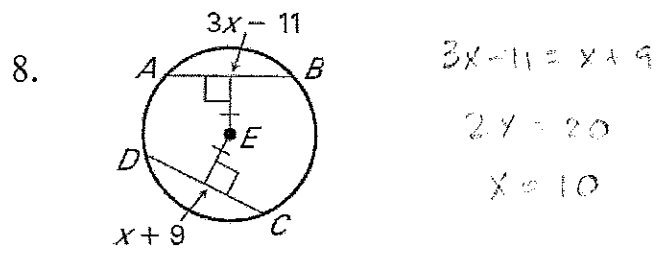
Find the value of x.



$$12x + 7 = 3x + 16$$

$$9x = 9$$

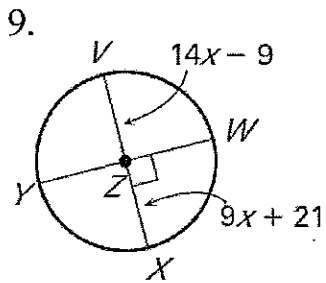
$$x = 1$$



$$3x - 11 = x + 9$$

$$2x = 20$$

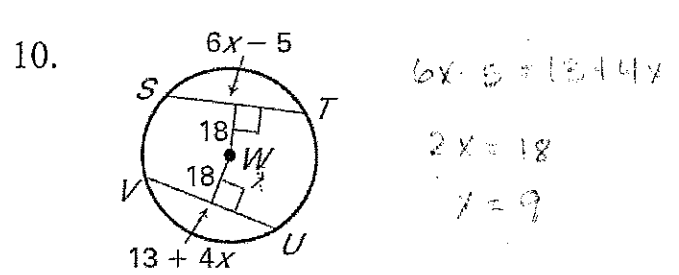
$$x = 10$$



$$14x - 9 = 9x + 21$$

$$5x = 30$$

$$x = 6$$

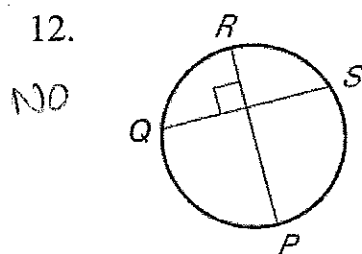
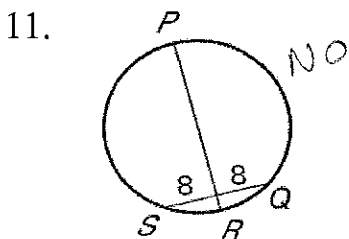


$$6x - 5 = 13 + 4x$$

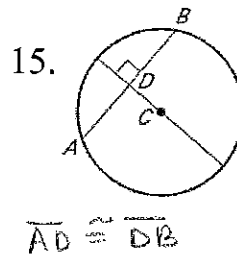
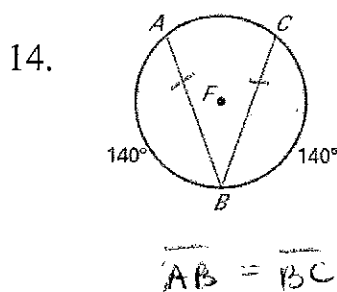
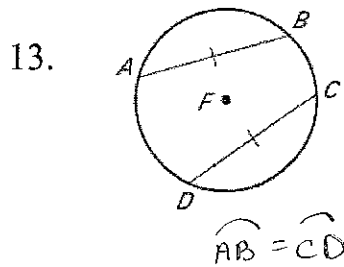
$$2x = 18$$

$$x = 9$$

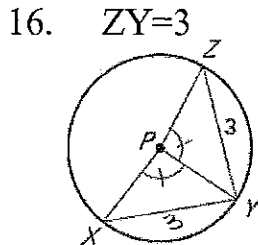
Determine whether \overline{PR} is a diameter of the circle.



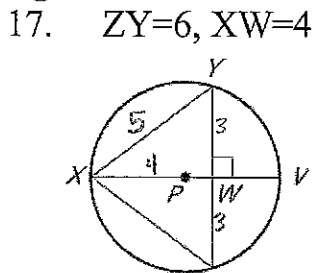
What can you conclude about the diagram? State a postulate or theorem that justifies your answer.



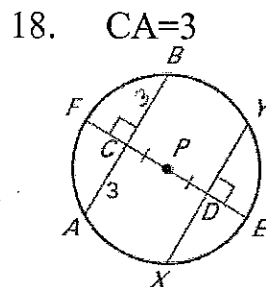
P is the center of the circle. Use the given information to find *XY*.



$XY = 3$

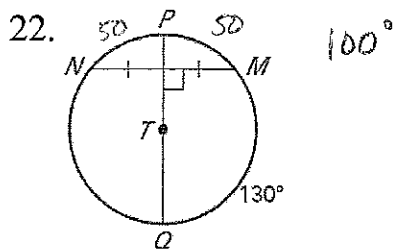
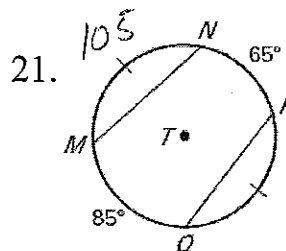
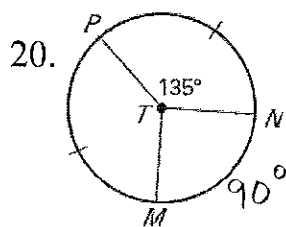
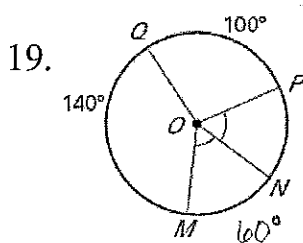


$XY = 5$

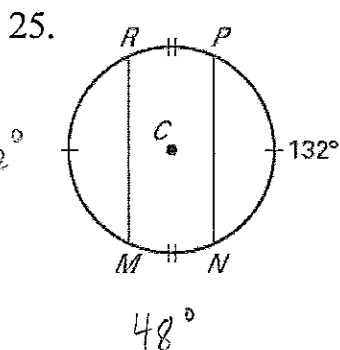
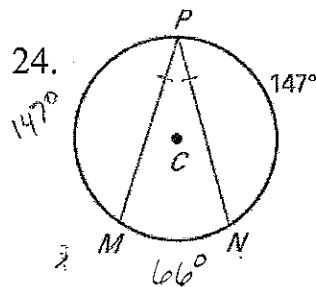
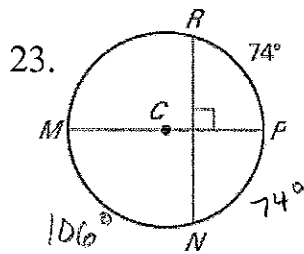


$XY = 6$

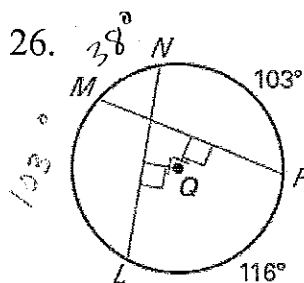
Find the measure of \widehat{MN} .



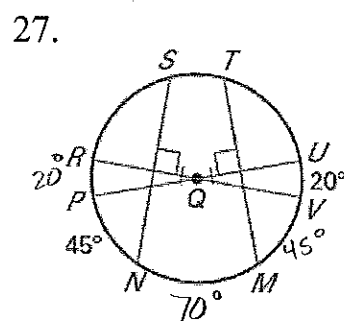
100°



48°



103°



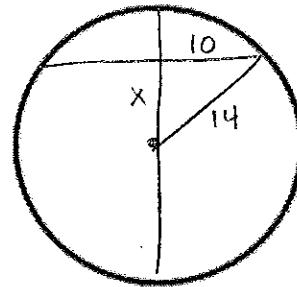
70°

28. If a radius of a circle is 14 in. and a chord of the circle is 20 in. What is the distance from the chord to the center?

$$x = \sqrt{96}$$

$$4\sqrt{6}$$

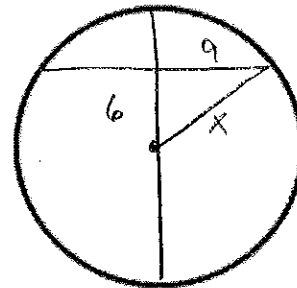
$$x = 9.8$$



29. If a chord is 18 ft. long and is 6 ft from the center, what is the radius of the circle?

$$x = \sqrt{117}$$

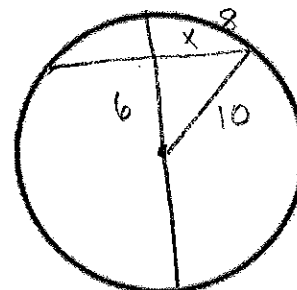
$$x = 10.8$$



30. If a chord is 6 in. from the center of a circle with a diameter of 20 in, how long is the chord?

$$x = 8$$

$$\text{Chord} = 16$$



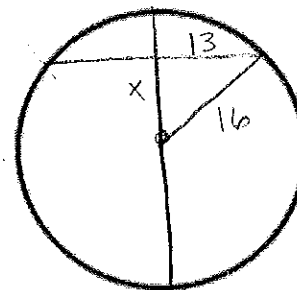
31. If the diameter of a circle is 32 mm long and a chord is 26 mm long, how far from the center is the chord?

$$x^2 + 13^2 = 16^2$$

$$x^2 = 87$$

$$x = \sqrt{87}$$

$$x = 9.3$$



32. If a chord is 12 in. long and is 4 in. from the center, how long is the diameter?

$$x = \sqrt{52}$$

$$x = 2\sqrt{13}$$

$$d = 4\sqrt{13} \text{ or}$$

$$d = 14.4$$

