


Theorems / Properties

May 21

① ITT Isosceles Triangle Theorem
(two sides + two angles are equal) 

② SATT Sum of the Angles in a Triangle Theorem
(angles of a Δ add to 180°)

③ TRP Tangent Radius Property 

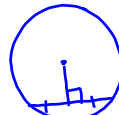
④ CIAP Central+Inscribed Angle Property



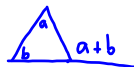
⑤ OAT Opposite Angle Theorem 

⑥ IAP Inscribed Angle Property 

⑦ PCP Perpendicular Chord Property



⑧ EAT Exterior Angle Theorem

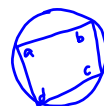


⑨ SAT Supplementary Angle  $a = 180 - 130 = 50^\circ$

⑩ ASP Angles in a Semicircle Property



⑪ CQP Cyclic Quadrilateral Property



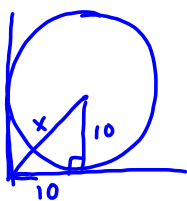
$\angle a + \angle c = 180^\circ$
 $\angle d + \angle b = 180^\circ$

⑫ $c^2 = a^2 + b^2$
 $a^2 = c^2 - b^2$ Pythagorean Theorem

Problems with the homework?

Review Exercise pp. 418-419 omit #3

#4



$$c^2 = a^2 + b^2$$

$$x^2 = 10^2 + 10^2$$

$$= 100 + 100$$

$$= 200$$

$$x = \sqrt{200}$$

$$= 14.1 \text{ cm}$$

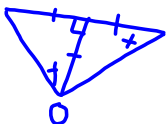
#2



LS	RS
16^2	$13^2 + 7^2$
256	$169 + 49$
	218

LS=RS No

7. b)

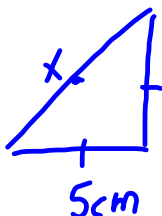


$$y = \frac{180 - 90}{2}$$

$$= 45^\circ$$

$$x = 45^\circ$$

8.



$$x = 5^2 + 5^2$$

$$= 25 + 25$$

$$= 50$$

$$x = \sqrt{50}$$

$$= 7.1 \text{ cm}$$

$$\text{radius} = \frac{7.1}{2}$$

$$= 3.6 \text{ cm}$$

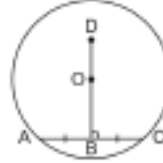
Concept Reinforcement

Practice Test p.420

Extra practice #2

Lesson 8.2

1. Point O is the centre of the circle.



2. $x^\circ = 90^\circ$; $y^\circ = 42^\circ$
3. $x = 7$ cm; y is about 16.6 cm.
4. The chord is about 24.5 cm from the centre.
5. a) The closer chord is the 16-cm chord.
b) The longer chord is about 1.7 cm closer.