

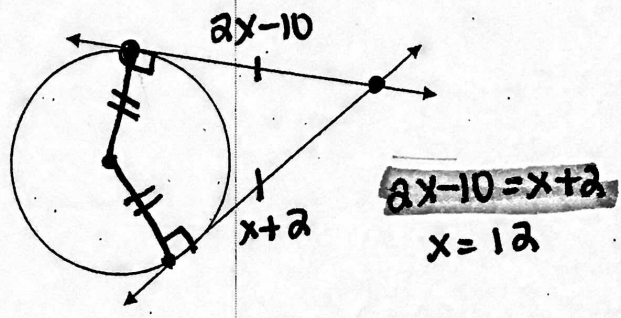
not tangent

Math 3 Unit 5

Name key

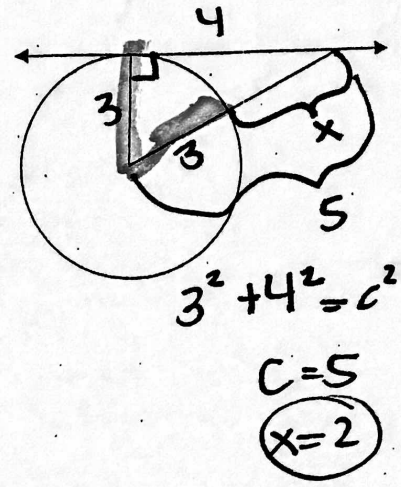
Day 2 Notes: Segments

Tangent - a line which intersects the circle at one point



$$2x-10 = x+2$$

$$x = 12$$



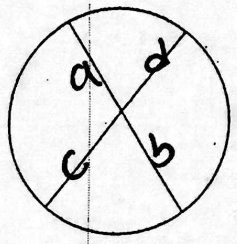
$$3^2 + 4^2 = c^2$$

$$c = 5$$

$$x = 2$$

Segments in Circles:

IN the circle  
railroad



$$ab = cd$$

(ex)  
a = 3  
b = ?

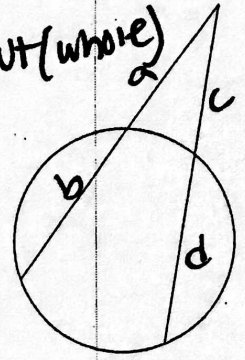
c = 7  
d = 6

$$\rightarrow 3b = (6)(7)$$

$$b = 14$$

Witch Hat

out(whole) = out(whole)



a = 8  
b = 2  
c = 4  
d = ?

$$a(a+b) = c(c+d)$$

$$8(8+2) = 4(4+d)$$

$$8(10) = 16 + 4d$$

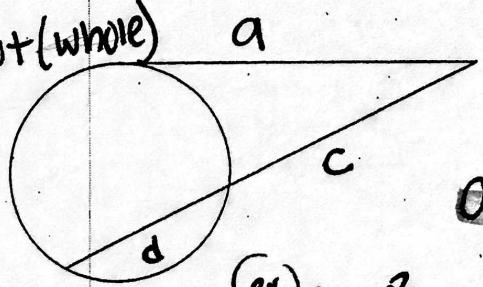
$$80 = 16 + 4d$$

$$64 = 4d$$

$$d = 16$$

Bird

tangent<sup>2</sup> = out(whole)



(ex) a = 8  
c = 4  
d = ?

$$a^2 = c(c+d)$$

$$8^2 = 4(4+d)$$

$$64 = 4(4+d)$$

$$16 = 4+d$$

$$d = 12$$