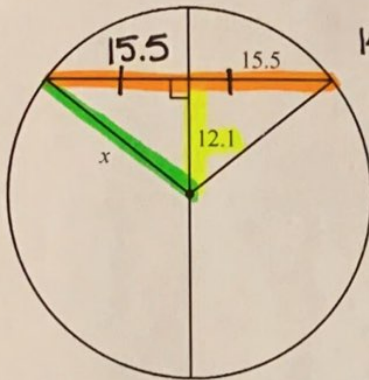


5.4 Practice All (Quiz Review)

Find the length of the segment indicated. Round your answer to the nearest tenth if necessary.

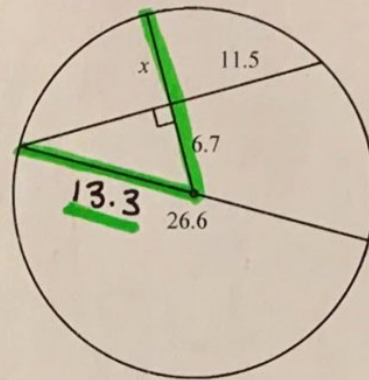
1)



$$15.5^2 + 12.1 = x^2$$

$$386.66 = x^2$$

$$19.7 = x$$

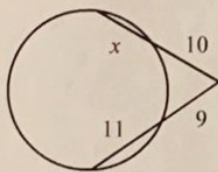


$$x + 6.7 = 13.3$$

$$x = 6.6$$

Solve for x. Assume that lines which appear tangent are tangent.

3)



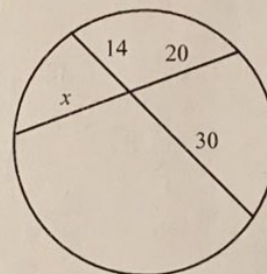
$$10(10+x) = 9(20)$$

$$100 + 10x = 180$$

$$10x = 80$$

$$x = 8$$

4)

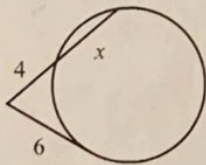


$$x \cdot 20 = 14 \cdot 30$$

$$20x = 420$$

$$x = 21$$

5)

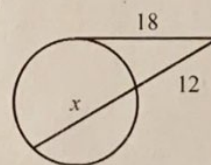


$$6^2 = 4(x+4)$$

$$36 = 4x + 16$$

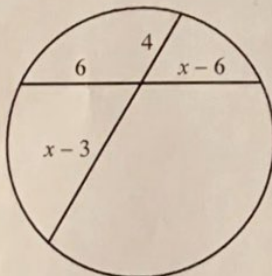
$$x = 5$$

6)



$$18^2 = 12(x+12)$$

7)



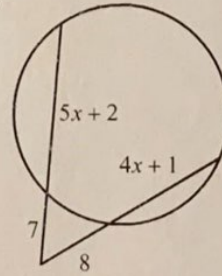
$$6(x-6) = 4(x-3)$$

$$6x - 36 = 4x - 12$$

$$2x = 24$$

$$x = 12$$

8)



$$7(7+5x+2) = 8(8+4x+1)$$

$$7(9+5x) = 8(9+4x)$$

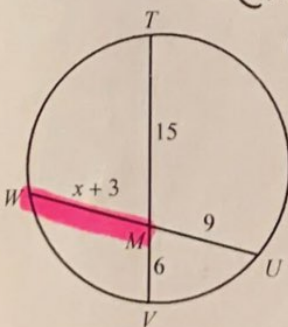
$$63 + 35x = 72 + 32x$$

$$3x = 9$$

$$x = 3$$

Find the measure of the line segment indicated. Assume that lines which appear tangent are tangent.

9) Find MW



$$9(x+3) = 15 \cdot 6$$

$$9x + 27 = 90$$

$$9x = 63$$

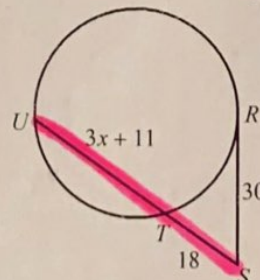
$$x = 7$$

$$mW = x + 3$$

$$= 7 + 3$$

$$mW = 10$$

10) Find SU



$$30^2 = 18(18+3x+11)$$

$$900 = 18(3x+29)$$

$$900 = 54x + 522$$

$$378 = 54x$$

$$7 = x$$

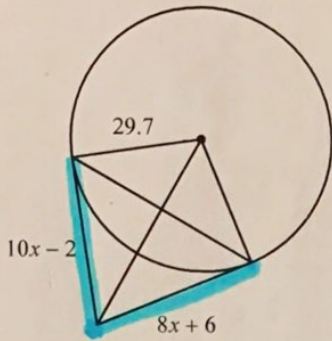
$$SU = 18 + 3x + 11$$

$$= 18 + 3(7) + 11$$

$$SU = 50$$

Solve for x. Assume that lines which appear to be tangent are tangent.

11)

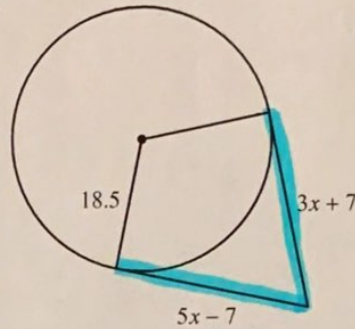


$$10x - 2 = 8x + 6$$

$$2x = 8$$

$$x = 4$$

12)

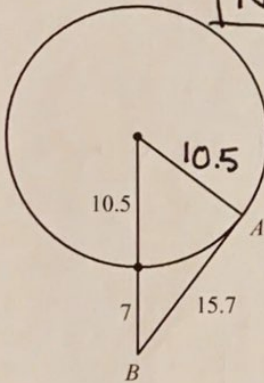


$$5x - 7 = 3x + 7$$

$$x = 7$$

Determine if line AB is tangent to the circle.

13)

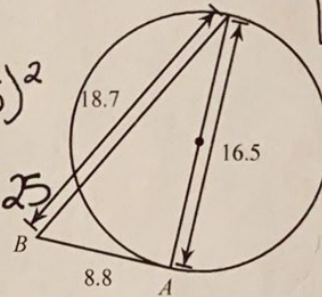


Not tangent

$$(10.5)^2 + (15.7)^2 \stackrel{?}{=} (17.5)^2$$

$$356.74 \neq 306.25$$

14)



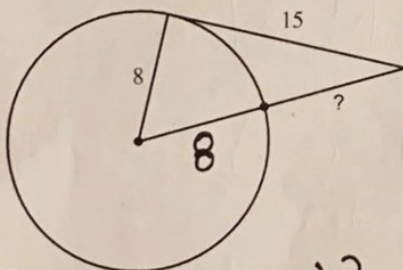
Tangent

$$(16.5)^2 + (8.8)^2 \stackrel{?}{=} (18.7)^2$$

$$349.69 = 349.69$$

Find the segment length indicated. Assume that lines which appear to be tangent are tangent.

15)



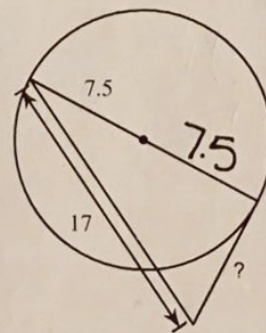
$$8^2 + 15^2 = (x+8)^2$$

$$\sqrt{289} = \sqrt{(x+8)^2}$$

$$17 = x+8$$

$$x = 9$$

16)



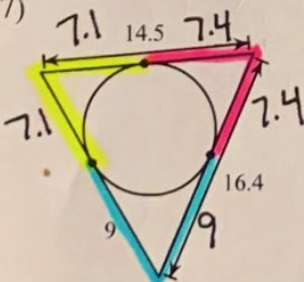
$$(15)^2 + b^2 = 17^2$$

$$b^2 = 64$$

$$b = 8$$

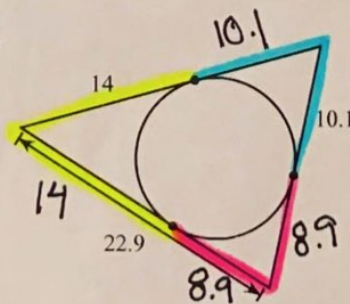
Find the perimeter of each polygon. Assume that lines which appear to be tangent are tangent.

17)



$$14.5 + 16.4 + 9 + 7 = 47$$

18)



$$22.9 + 8.9 + 10.1 + 10.1 + 14 = 66$$