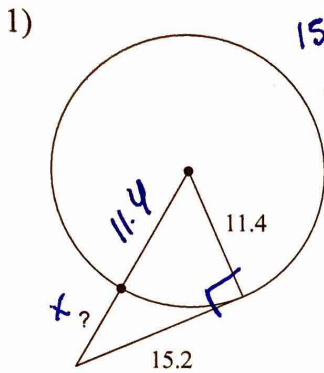


HW 2 - Segments in Circles

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



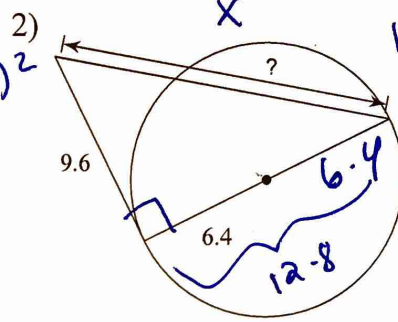
$$15.2^2 + 11.4^2 = (x + 11.4)^2$$

$$231.04 + 129.96 = (x + 11.4)^2$$

$$361 = (x + 11.4)^2$$

$$19 = x + 11.4$$

$x = 7.6$



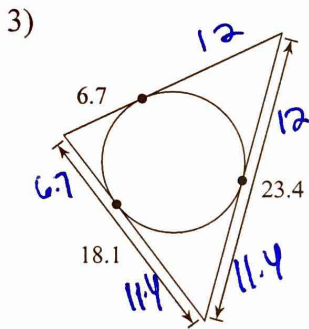
$$12.8^2 + 9.6^2 = x^2$$

$$163.84 + 92.16 = x^2$$

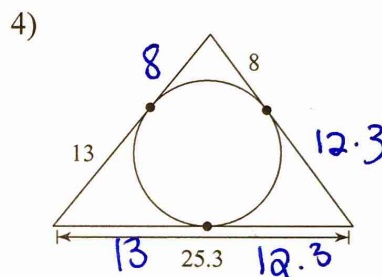
$$256 = x^2$$

$x = 16$

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

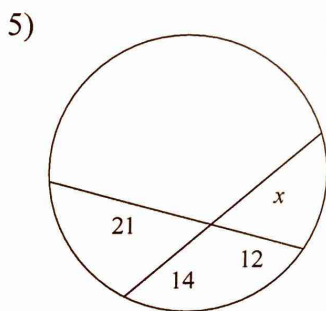


60.2



66.6

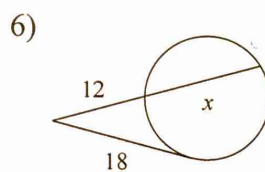
Solve for x. Assume that lines which appear tangent are tangent.



$$x \cdot 14 = 21 \cdot 12$$

$$14x = 252$$

$x = 18$

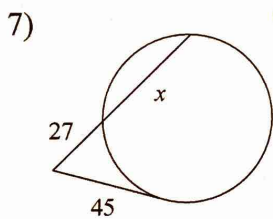


$$18^2 = 12(12 + x)$$

$$324 = 144 + 12x$$

$$180 = 12x$$

$x = 15$

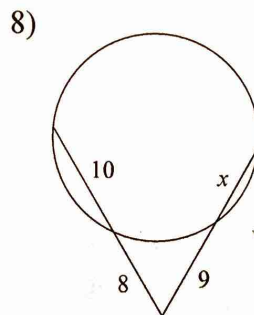


$$45^2 = 27(27 + x)$$

$$2025 = 729 + 27x$$

$$1296 = 27x$$

$x = 48$



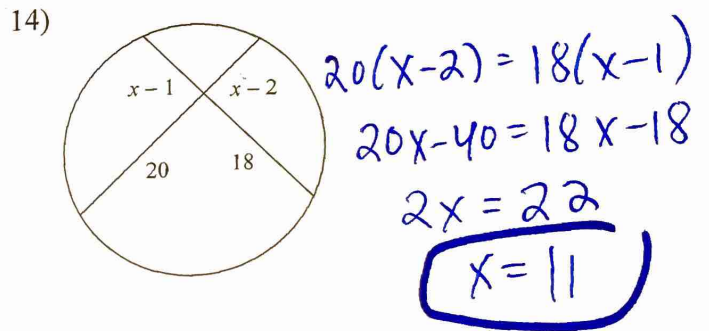
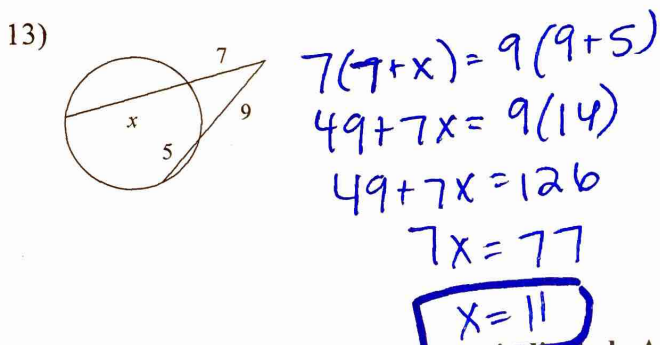
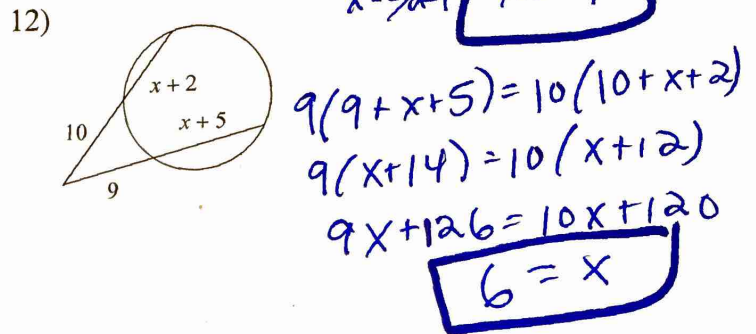
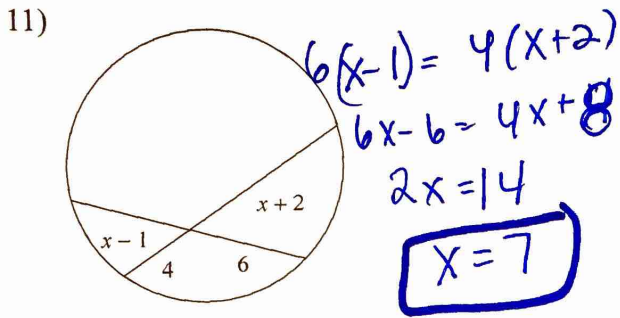
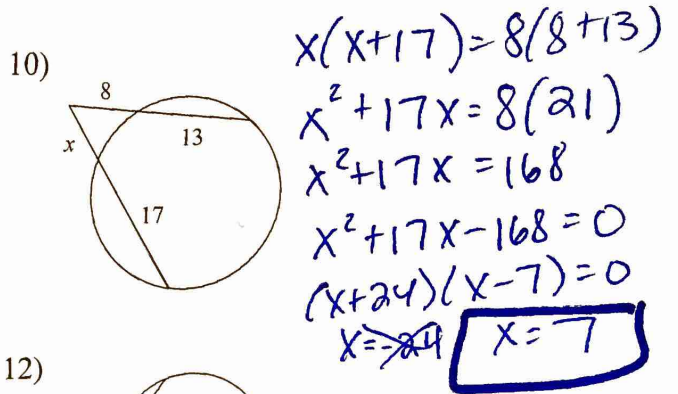
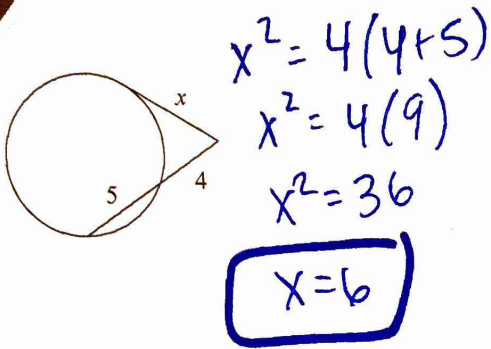
$$8(8 + 10) = 9(9 + x)$$

$$8(18) = 81 + 9x$$

$$144 = 81 + 9x$$

$$63 = 9x$$

$x = 7$



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

