



Construct each of the following figures using the segment lengths and angle measure given above:

1. A segment with length $x + y$.
2. A segment with length $2(x + y)$.
3. An angle with a measure equal to $2n^\circ$.
4. An equilateral triangle with side length y .
 - a. Next draw an exterior angle for each vertex.
 - b. Construct the bisector of each exterior angle.
 - c. Then name three angles with different angle measures represented in your figure, and state the measures.
5. A right triangle with leg lengths x and y .
6. An isosceles triangle with a vertex angle of n° and a base of length x .
7. A square with side length s (recall that a square has all right angles and all sides that are congruent).
8. A rectangle with sides of length x and y (recall that a rectangle has four right angles).

For exercises 9-10, begin with a diagram roughly like the one shown, but larger. (Hint for both exercises: begin by constructing the perpendicular line to line l that passes through Point X .)

9. Construct a line that is parallel to line l and tangent to $\odot X$ (the circle with center X).
10. Construct a line that is perpendicular to line l and tangent to $\odot X$.

