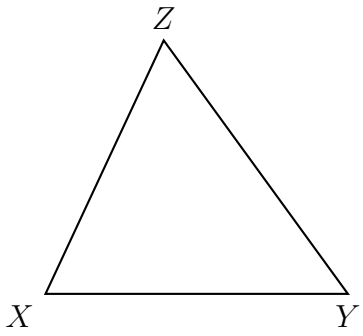
1.5 Homework: Polygons, perimeter

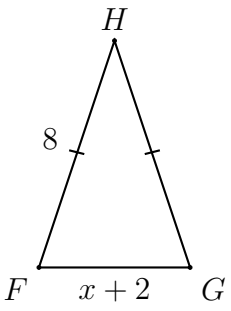
1. Line segments that have the same length are _____.
2. Given isosceles $\triangle XYZ$ with $\overline{XY} \cong \overline{YZ}$. On the diagram mark the congruent line segments with tick marks.



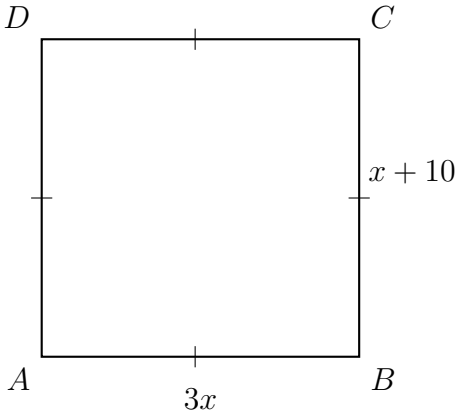
3. Given the rectangle $ABCD$ shown below.
   (a) Measure and mark the length and width of the rectangle in centimeters.
   (b) Calculate its perimeter P. (show your work as an equation)

4. The perimeter of the isosceles $\triangle FGH$ is 21 with $\overline{FH} \cong \overline{GH}$, $FG = x + 2$, $FH = 8$. Fill in the blanks then solve for x.

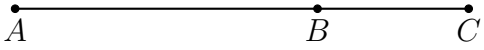
$$P = 8 + \_\_\_\_ + (x + 2) = \_\_\_\_\_$$



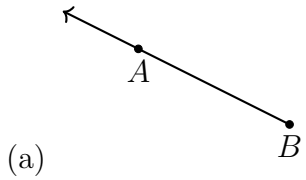
5. A square has four sides of equal length. Given $ABCD$ with $AB = 3x$ and $BC = x + 10$. Find the square's perimeter. (hint: first find x)



6. Given $\overline{ABC}$, $AB = 3.8$, and $BC = 1.7$. Find AC.



7. Use symbols to write the name of each geometric figure.



(a)

(b)

(c)

8. Given Q bisects $\overline{PR}$, with $PQ = 3x - 12$, $QR = 2x$. Find PR.