1.4 Homework: Segments
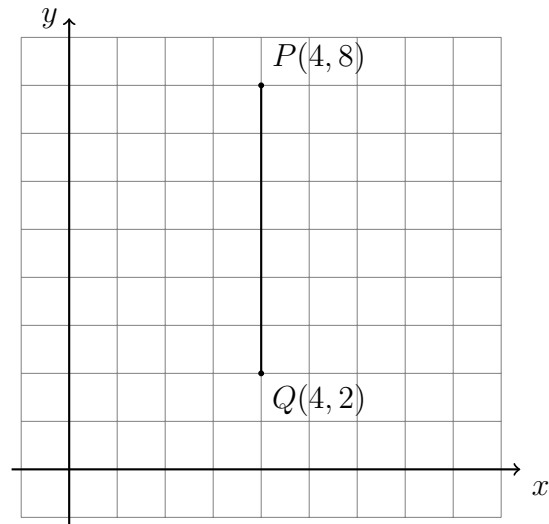
1. Line segments that have the same length are _____.

2. Two line segments or angles of equal measure are _____.

3. The vertical line segment $\overline{PQ}$ is plotted on the coordinate plane with $P(4, 8)$ and $Q(4, 2)$.
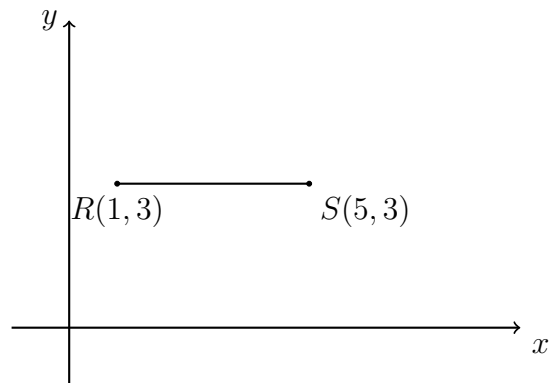
   Find the length PQ.

   Show the calculation, including the absolute value bars. Count on the grid as a check. (leave marks)
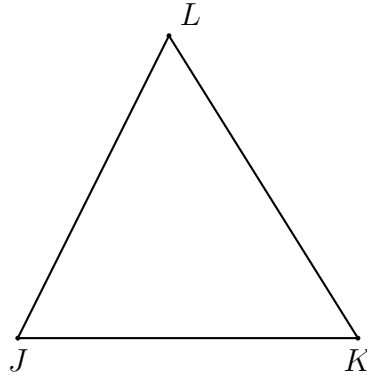

4. The horizontal line segment $\overline{RS}$ is plotted on the coordinate plane with $R(1, 3)$ and $S(5, 3)$.
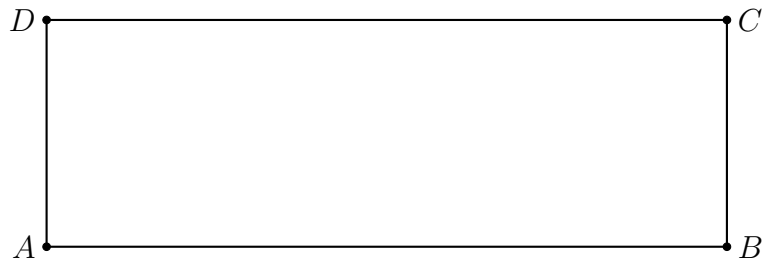
   Find the length RS.

   Show the calculation.

5. Given $\triangle JKL$ with $\overline{JK} \cong \overline{KL}$. On the diagram mark the congruent line segments with tick marks.
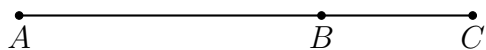

6. Given the rectangle $ABCD$ shown below.

   (a) Measure and mark the length and width of the rectangle in centimeters.

   (b) Calculate the area of the rectangle in square centimeters. (show your work)
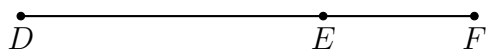
7. Given $\overline{ABC}$, $AB = 3.8$, and $BC = 1.7$. Find AC.

$$\overset{\textstyle\bullet}{A} \quad\quad\quad\quad\quad\quad \overset{\textstyle\bullet}{B} \quad \overset{\textstyle\bullet}{C}$$

8. Given $\overline{DEF}$, $DE = 3\frac{1}{3}$, and $EF = 1$. Find DF.

$$\overset{\textstyle\bullet}{D} \quad\quad\quad\quad\quad\quad \overset{\textstyle\bullet}{E} \quad \overset{\textstyle\bullet}{F}$$

9. Given $\overline{PQR}$, $PQ = x - 2$, $QR = x$, $PR = 10$. Find PQ.

$$\overset{\textstyle\bullet}{P} \quad\quad\quad\quad\quad\quad \overset{\textstyle\bullet}{Q} \quad\quad\quad\quad\quad\quad \overset{\textstyle\bullet}{R}$$