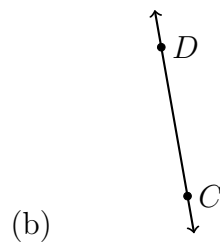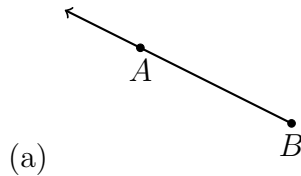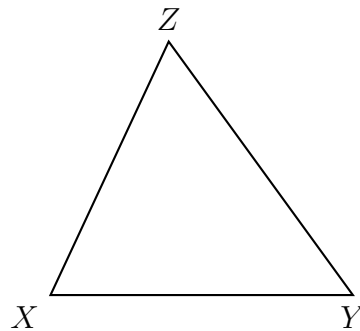**1.7 Exit Note Quiz: Length and perimeter, geometric notation**

1. Conventions: terminology, notation, diagramming

1. Use symbols to write the name of each geometric figure.
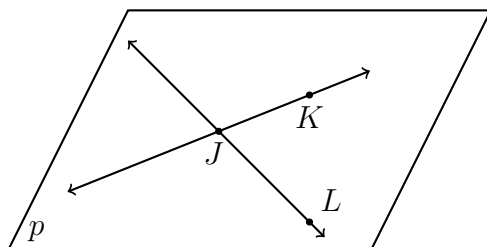
(a) A B

(b) D C

(c) F E

2. Objects in the same plane are _____.

3. Given isosceles $\triangle XYZ$ with $\overline{XY} \cong \overline{YZ}$. On the diagram mark the congruent line segments with tick marks.

Z

X Y

4. Mark point L on the ray exactly 8 centimeters from the endpoint K. (measure it)

K

5. Identify two lines in the given plane.
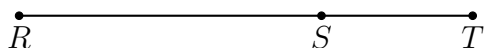
K

J

L

p

2. Perimeter and special shapes

6. The perimeter of a rectangle is 54 centimeters. If its length is 6 cm., what is its width?
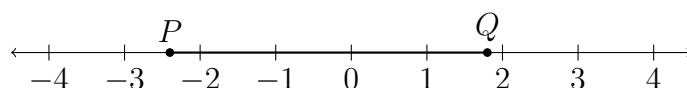
3. Modeling situations with algebra

7. Given $\overline{RST}$, $RS = 5\frac{3}{4}$, and $RT = 8\frac{3}{8}$.

   (a) Find ST as a fraction.
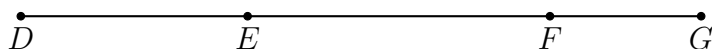
   R ———————————— S ——— T

   (b) The postulate used in this problem is the _____.

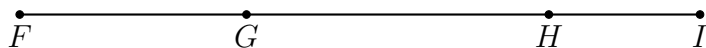8. Given $P(-2.4)$ and $Q(1.8)$, as shown on the number line. Find the length of the line segment $\overline{PQ}$.

   $$\begin{array}{ccccccccc} & P & & & & & & Q & \\ -4 & -3 & -2 & -1 & 0 & 1 & 2 & 3 & 4 \end{array}$$

9. Given $\overline{DEFG}$, $DE = 3\frac{1}{4}$, $EF = 6\frac{1}{4}$, and $FG = 1\frac{3}{4}$. (diagram not to scale)

   Find DG, expressed as a fraction, not a decimal.

   D ——————— E ——————————— F ——— G

10. Given $\overline{FGHI}$, $FG = 8\frac{1}{6}$, $GH = 12\frac{1}{3}$, and $HI = 5\frac{1}{2}$. (diagram not to scale)

    Find FI.

    F ——————— G ——————————— H ——— I

11. Given $\overleftrightarrow{JK}$ as shown on the number line.

    $$\begin{array}{cccccccccccc} & & J & & & & & & K & \\ 50 & 52 & 54 & 56 & 58 & 60 & 62 & 64 & 66 & 68 & 70 \end{array}$$

    What is the midpoint between the points J and K?

4. Solving algebraic equations for one variable

12. Given $\overline{RST}$, S bisects $\overline{RT}$, $RS = 17x - 10$, $ST = 13x - 2$. Find RT. Complete all the steps for full credit.