1) Diagrams and notation

Given the points P and Q, draw $\overleftrightarrow{PQ}$.

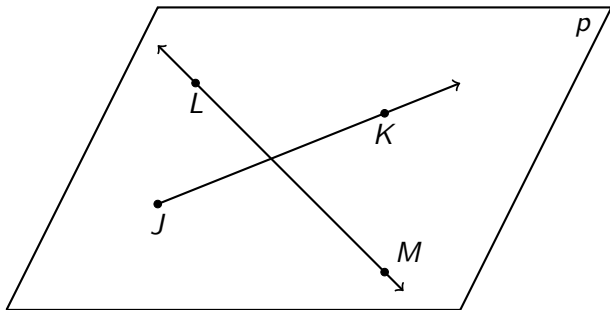$\overset{\textstyle\bullet}{Q}$

$\overset{\textstyle\bullet}{P}$
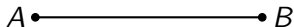
2) Diagrams and notation

Write your answers using proper notation

1. What is the name of the ray shown in plane *p*
2. Mark the intersection of $\overrightarrow{JK}$ and $\overleftrightarrow{LM}$ on the diagram and label it *N*.
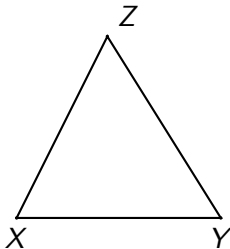
3) Diagrams and notation

Sketch a circle centered at point A with radius AB.

$A \bullet\!\!\!\rule[0.5ex]{6cm}{0.4pt}\!\!\!\bullet B$

4) Diagrams and notation

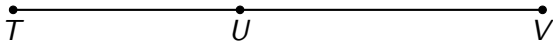Given isosceles $\triangle XYZ$ with $\overline{XY} \cong \overline{XZ}$.

On the diagram mark the congruent line segments with tick marks.

5) Applying the segment addition postulate

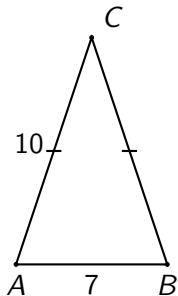Given $\overline{TUV}$, $TU = 4.7$, and $UV = 6.2$. Find TV.

Show your work by marking the diagram and writing an equation.

T———————U———————————————V
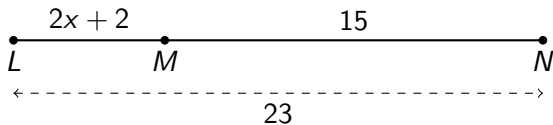
6) Applying the segment addition postulate

Find the perimeter of the isosceles $\triangle ABC$, given $\overline{AC} \cong \overline{BC}$, $AB = 7$, and $AC = 10$

Show your work with an equation for full credit.
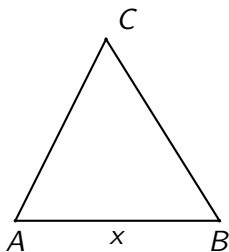
7) Applying the segment addition postulate

Given $\overline{LMN}$, $LM = 2x + 2$, $MN = 15$, $LN = 23$. Find x.

1. Write down an equation to represent the situation.

2. Solve for x.

3. Check your answer.
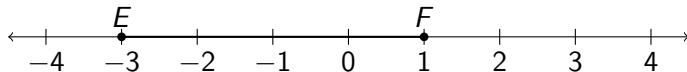
8) Applying the segment addition postulate

Given equilateral $\triangle ABC$ having perimeter of 21. Find the length of side $\overline{AB}$, x.

9) Finding lengths on the number line

Given $E(-3)$ and $F(1)$, as shown on the number line.

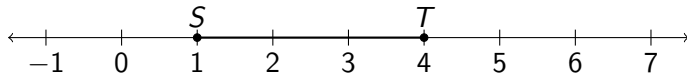Find the length of the line segment $\overline{EF}$.

State an equation and the solution.

Check your work by counting the distance. Leave marks to show your work.

10) Finding lengths on the number line (spicy)

Given $S(1)$ and $T(4)$, as shown on the number line.

Find point U given that point T bisects $\overline{SU}$. Plot and label U on the number line.

11) Applying the segment addition postulate

Given M is the midpoint of $\overline{AB}$, $AM = 3x + 6$, $MB = 15$.

1. Mark the diagram with the values and tick marks
2. Write an equation and solve for x
3. Check your result

12) Applying the segment addition postulate

The points Q and R trisect the line segment $\overline{PS}$. $PS = 13\frac{1}{2}$.

1. Mark and label the approximate locations of Q and R.
2. Find PQ. State an equation for full credit.

P ———————————————————————— S