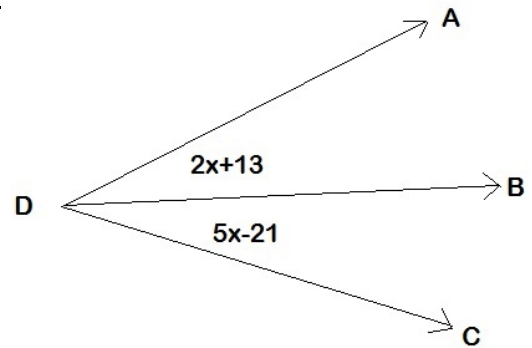
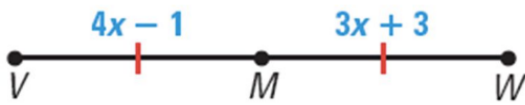


Show expected work, marks, and labels. Circle your answers!

1.2 \overrightarrow{DB} bisects $\angle ADC$...find the value of x.



2.3 Find MW.



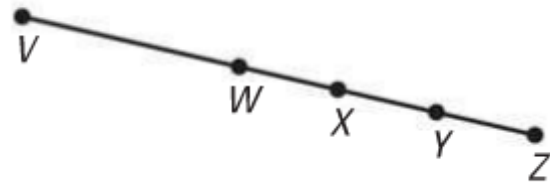
In 3 – 6, use the figure with $VZ = 90$, W bisects \overline{VZ} , and $\overline{WX} \cong \overline{XY} \cong \overline{YZ}$ to find the lengths.

3.1 YZ

4.1 VW

5.1 VX

6.1 VY



In 7 – 10, sketch an example of each pair of angles using $\angle 1$ and $\angle 2$ as the labels.

7.1 Vertical Angles

8.1 Linear Pair

9.1 Complementary Angles

10.1 Supplementary Angles

11.2 For part A and B state whether the statement is true or false. Then explain your decision.

A) If points are collinear then they are coplanar. True or False? _____

Explain: _____

B) If points are coplanar then they are collinear. True or False? _____

Explain: _____

In 12 and 13, $m\angle DOG = 10x + 55$ and $m\angle DOC = 6x + 5$ and the two angles are supplementary.

12.3 Sketch the situation and find the measures of $\angle DOG$ and $\angle DOC$.

13.2 Classify $\angle DOG$ and $\angle DOC$ and explain.

14.3 $\angle 1$ and $\angle 2$ are complementary angles. Find $m\angle 1$ if $m\angle 2$ is triple $m\angle 1$.

15.2 In \overline{LA} , $L(7,-1)$ & has midpoint $X(1,4)$. Find the coordinates of endpoint A .

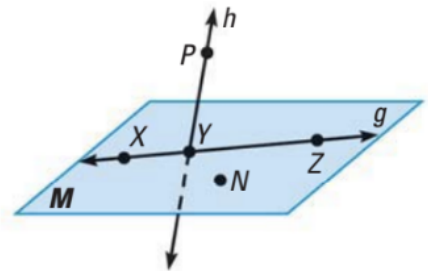
In 16 – 19, use the figure at the right and use proper notation.

_____ 16.1 Name 3 points that are collinear.

_____ 17.1 Name a pair of opposite rays.

_____ 18.2 Give two other names for \overleftrightarrow{PY}

_____, _____, _____ 19.2 Name the plane shown three different ways.

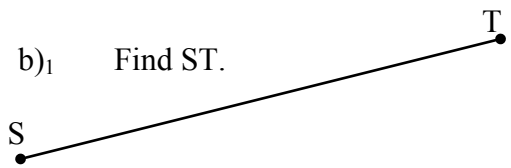


20.3 Sketch the following...

Plane R, containing \overleftrightarrow{AB} and line f .
 Line f , \overleftrightarrow{XY} and \overleftrightarrow{AB} intersect at point A.
 Line h also intersects at point A,
 but does not lie in plane R.

21. Get a ruler!

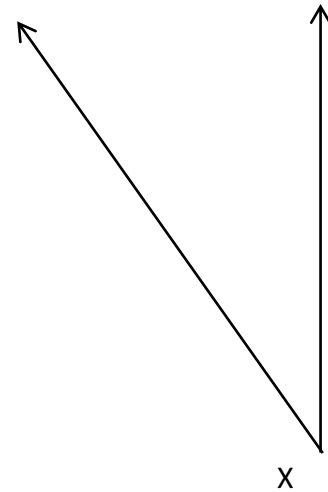
a)₁ Draw \overline{BE} 3.7 cm in length.



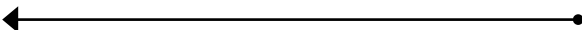
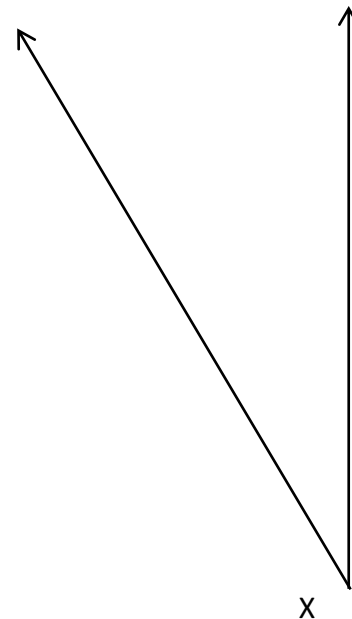
22. $\angle X$ is given.

a)₁ Find the measure of angle X to the nearest degree.

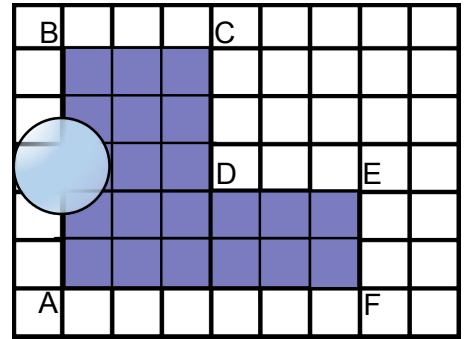
b)₂ Construct the bisector.



23.₃ $\angle X$ is given. Use the workline to construct $3 \cdot m\angle X$.



24.9 A landscaping company is designing a courtyard with a circular fountain. The courtyard's perimeter is shown by the shaded region.



1 unit = 5 feet
Circle = fountain

_____ a. Classify the polygon shape of the courtyard.

_____ b. Identify any congruent line segments formed by the courtyard.

_____ c. Tell whether the courtyard appears to be equilateral, equiangular, regular, or none.

A(____, ____)

B(____, ____)

d. Draw axes on the grid with (0, 0) at the bottom right corner.

C(____, ____)

D(____, ____)

Give the coordinate of the vertices of the courtyard.

E(____, ____)

F(____, ____)

_____ e. The center of the courtyard's fountain is the midpoint of \overline{AB} . Give the coordinates of the center of the fountain.

_____ f. Find the measure of $\angle ADB$ to the nearest degree, using a protractor.

_____ g. Give the two other names for $\angle FED$

_____ h. Find the area of the courtyard's fountain, in terms of feet. (round to the tenths)

_____ i. Find the circumference of the courtyard's fountain, in terms of feet. (round to the tenths)