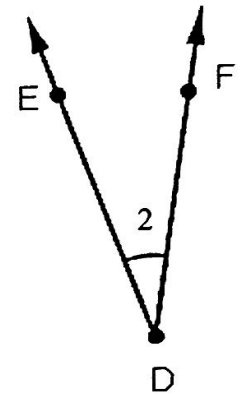
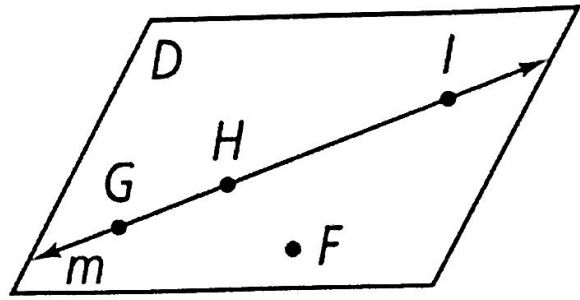


Use the diagram at the right for Questions 1-5.



1. What are two other names for \overleftrightarrow{GH} ? \overleftrightarrow{HI} \overleftrightarrow{GI}

2. What is one other way to name Plane D?

Plane GHF

3. Name one ray on \overleftrightarrow{GH} . \overrightarrow{GH}

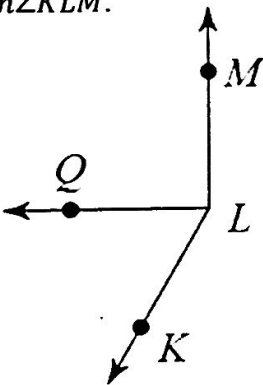
4. Is ray \overrightarrow{GH} the same as ray \overrightarrow{HG} ? Explain your answer.
YES

5. Name three collinear points. G H I

6. What are three ways to label the angle to the right?

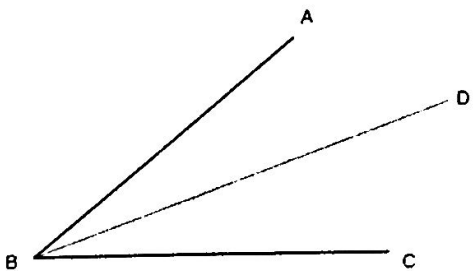
$\angle EDF$ $\angle D$
 $\angle FDE$
 $\angle 2$

7. $m\angle QLM = 90^\circ$, $m\angle KLM = 2x + 150$, and $m\angle KLQ = x + 60$. Find the value of x , $m\angle KLQ$, and $m\angle KLM$.



$x = \underline{10}$
 $m\angle KLQ = \underline{80}$
 $m\angle KLM = \underline{170}$

8. $\angle ABC$ is bisected by ray \overrightarrow{BD} . $m\angle ABD = 15x + 5$ and $m\angle ABC = 50$. Find the value of x , $m\angle ABD$, and $m\angle DBC$.



$x = \underline{4/3}$
 $m\angle ABD = \underline{25}$
 $m\angle DBC = \underline{25}$

9. Point E is between points G and O. $\overline{GE} = 2x$ and $\overline{EO} = 29$. If $\overline{GO} = 5x + 2$, find the values of x , \overline{GE} , and \overline{GO} .

$$x = \underline{9}$$

$$\overline{GE} = \underline{18}$$

$$\overline{GO} = \underline{47}$$

10. Find the **distance** between $(7,2)$ and $(12,-7)$. Provide the exact answer (radical answer) and decimal approximation to the nearest tenths place.

$$\text{Exact Answer} = \underline{\sqrt{106}}$$

$$\text{Decimal Approximation} = \underline{10.3}$$

11. Find the **midpoint** between $(19,5)$ and $(-8,0)$.

$$M(5.5, 2.5)$$

12. Kristin is 6 miles north and 5 miles east of her home. On her drive home, she takes a detour and drives 9 miles south and 10 miles west. How far is she from home? Provide the exact answer (radical answer) and decimal approximation to the nearest tenths place.

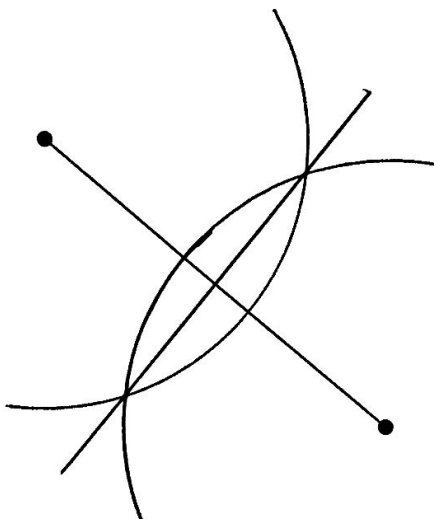
$$\text{Exact Answer} = \underline{\sqrt{34}}$$

$$\text{Decimal Approximation} = \underline{5.8}$$

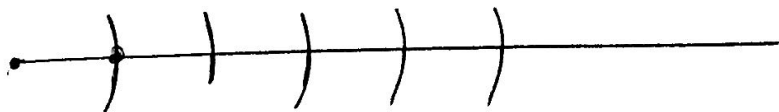
13. \overline{PK} has a midpoint N at $(2, -30)$ and end point P at $(-15, 20)$. Identify the ordered pair of endpoint K.

$(-6.5, -5)$

14. Construct the **bisector** of the segment.



15. Construct a segment **five times** as long as the given segment.



16. Construct the **copy** of the angle below.

