Geometry Worksheet
Vocab/Sketch Review
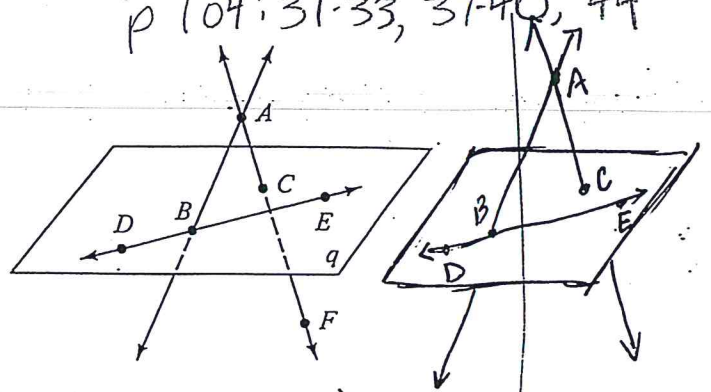
Part A

**True or false?**

7. $\overleftrightarrow{DE}$ is contained in plane $q$.
8. $\overleftrightarrow{AC}$ and $\overleftrightarrow{FA}$ are the same line.
9. $\overleftrightarrow{AB}$ and $\overleftrightarrow{DE}$ intersect in point $C$.
10. $B$, $C$, and $E$ are noncoplanar.
11. Point $B$ is the intersection of $\overleftrightarrow{AB}$ and plane $q$.
12. The intersection of $\overleftrightarrow{AF}$ and plane $q$ is point $C$.
13. $\overleftrightarrow{CF}$ passes through point $E$.
14. Point $A$ and plane $q$ do not intersect.
15. $\overleftrightarrow{DE}$ contains point $B$.

Draw and label each figure described below. Use a straightedge.  (on your own paper)

16. $\overleftrightarrow{MN}$ lying in plane $r$ and point $P$ in plane $r$ but not on $\overleftrightarrow{MN}$
17. $\overleftrightarrow{TU}$ intersecting plane $q$ in point $V$
18. $\overleftrightarrow{AB}$ and $\overleftrightarrow{CD}$ lying in plane $q$ such that $\overleftrightarrow{AB}$ and $\overleftrightarrow{CD}$ intersect at point $E$
19. $\overleftrightarrow{EF}$, $\overleftrightarrow{EG}$, and $\overleftrightarrow{EH}$ intersecting plane $p$ in points $F$, $G$, and $H$, respectively
20. $\overleftrightarrow{MN}$ not intersecting plane $r$ with $\overleftrightarrow{MQ}$ intersecting plane $r$ in point $Q$
21. noncollinear points $A$, $B$, and $C$ lying in plane $p$ with $\overleftrightarrow{DC}$ intersecting plane $p$
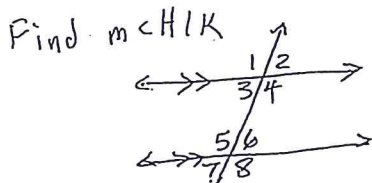
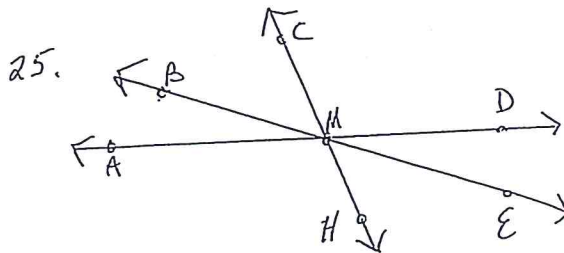22. Given: $\overrightarrow{IJ}$ bisects $\angle HIK$, m $\angle HIK = 48$ and m $\angle JIK = 3x + 15$. Find $X$.
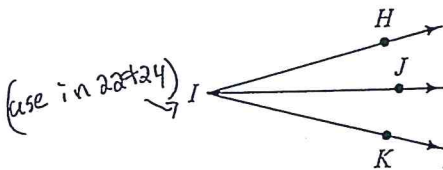
23. Given: $\overline{KL}$ bisects $\angle MKN$, m $\angle MKL = 5x + 3$, and m $\angle LKN = 6x - 4$. Find m $\angle MKL$.

(use in 22+24) 
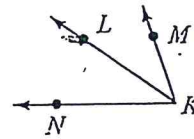
24.  m$\angle HIK = 5x - 18$
     m$\angle HIJ = 3x - 12$
     m$\angle JIK = 22$
     Find m$\angle HIK$

25. 
   a) Name two pairs of
      a) vertical angles
      b) linear pairs
      c) adjacent angles that are not linear pairs.

26. Explain why $\angle 1 \cong \angle 8$ if you assume that corresponding angles are congruent when parallel lines are cut by a transversal. You can accept that V.A. are $\cong$ (proved in class). (Hint: focus on 3 useful angles.)