Geometry Q1 Per: ___ Name: Key

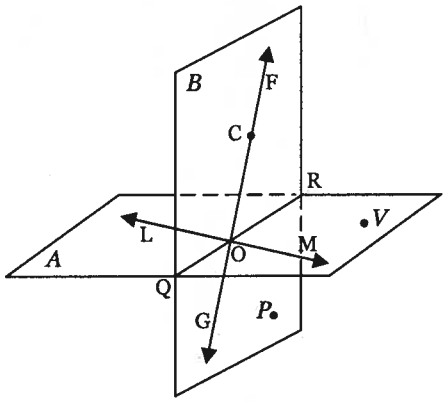
Unit 2 Review Worksheet

Match each term to a correct example of symbolic notation.

1. Point
2. Line
3. Plane
4. Ray
5. Segment
6. Length

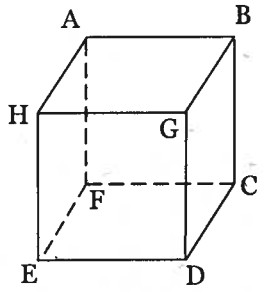
5. $\overline{AB}$
4. $\overrightarrow{PQ}$
3. GHIJ
6. OC
1. M
2. $\overleftrightarrow{DE}$

Using the diagram, decide if each statement is true or false.



7. F, G, and P coplanar True
8. O, M and V are collinear False
9. plane A contain $\overleftrightarrow{QR}$ True
10. L, O and C are coplanar True
11. point O is on $\overrightarrow{CF}$ False
12. $\overleftrightarrow{GF}$ intersects plane B False
13. O, M, R and C are coplanar False
14. Point Q is on $\overline{OR}$ False
15. planes A and B intersect at point O False
16. $\overleftrightarrow{OM}$ and $\overleftrightarrow{LM}$ are the same line True

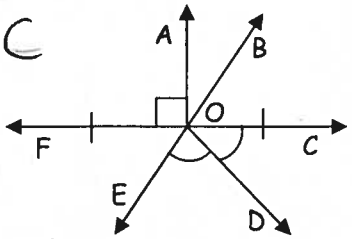
Use the following diagram to answer each.



17. Planes ABGH and BCDG intersect at $\overleftrightarrow{BG}$.
18. Planes EHGD and ABCF don't intersect.
19. $\overleftrightarrow{FC}$ intersects plane HAFE at point F.
20. $\overleftrightarrow{GB}$ and $\overleftrightarrow{AB}$ intersect at B.
21. Are F, E, H and A coplanar? Yes What about H, B, C and E? No

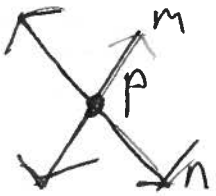
Use the diagram to write an equation using each postulate, theorem, or definition.

22. Segment Addition Postulate $FO + OC = FC$
23. Angle Addition Postulate $m\angle AOB + m\angle BOC = m\angle AOC$
24. Definition of Midpoint $FO = OC$
25. Definition of Angle Bisector $m\angle COD = m\angle EOD$
26. Vertical Angle Theorem $m\angle FOE = m\angle COB$
27. Definition of Complementary Angles $m\angle AOB + m\angle BOC = 90°$
28. Definition of Supplementary Angles $m\angle FOE + m\angle COE = 180°$

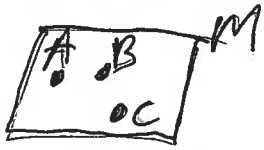


Fill in each blank with the best word. Draw and label a diagram for each sentence.

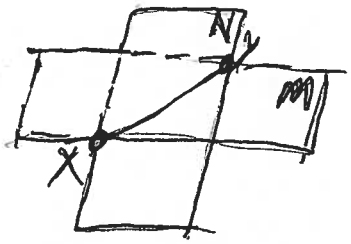
29. Two Lines intersect at one point.



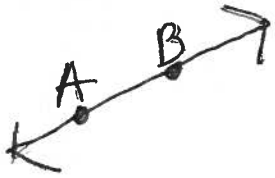
30. three non-collinear points determine one plane.



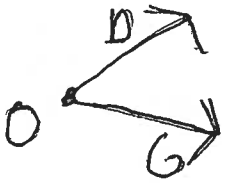
31. The intersection of two planes is a Line.



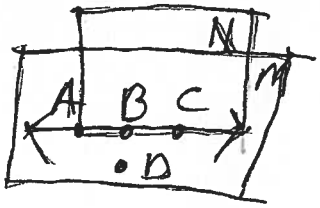
32. Two points make exactly one Line.



33. The sides of ∠DOG are $\overrightarrow{OD}$ and $\overrightarrow{OG}$.



34. Three collinear points determine 1 or more plane(s).

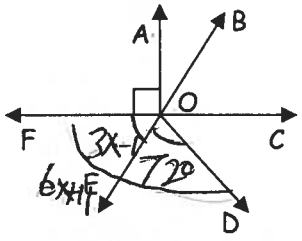


Use the given diagram to write an equation and solve for the value of x.

35. $\overrightarrow{OC}$ is the bisector of ∠BOD.
m∠BOC = 9x + 3 and m∠DOC = 8x + 7

$9x+3=8x+7$

$x=4$



36. O is the midpoint of $\overline{FC}$
OF = 5x − 4 and CO = 3x + 6

$5x-4=3x+6$

$2x=10$

$x=5$

37. m∠FOE = 3x - 1, m∠EOD = 72° and m∠FOD = 6x + 11

$3x-1+72=6x+11$

$3x+71=6x+11$

$60=3x$

$x=20$

38. EB = 6x - 8, OB = 12 and OE = 4x - 2

$6x-8=12+4x-2$

$6x-8=10+4x$

$2x=18$

$x=9$

39. m∠EOA = 13x and m∠AOB = x + 12

$13x+x+12=180$

$14x=168$

$x=12$