

Name: _____

Date: _____

For this activity you will need to download the "[Grid Paper](#)" under the resources link on the blog. One group will copy on the grid paper, while 1 or 2 people may do the work on the ENO Board. All students must turn in a paper copy of their work at the end of class. Both the Eno students and the group are encouraged to work together.

1. Draw a segment with endpoints C(3, 0) and D(4, 3).
2. What is the slope (as a fraction) of segment CD? _____
3. What is the length of segment CD (prime factored)? _____

4. Draw a line extending through points E(9, 3) and D(4, 3) to the edge of the paper.
5. What is the slope (as a fraction) of segment ED? _____
6. What is the length of segment ED (prime factored)? _____

7. Draw a ray with endpoint E(9, 3) that also extends through F(9, 0).
8. What is the slope (as a fraction) of segment EF? _____
9. What is the length of segment EF (prime factored)? _____

10. Draw a line extending through points G(6, -1) and C(3, 0) to the edge of the paper.
11. What is the slope (as a fraction) of segment GC? _____
12. What is the length of segment GC (prime factored)? _____

13. Draw a ray with endpoint E(9, 3) that also extends through H(8, 0).
14. What is the slope (as a fraction) of segment EH? _____
15. What is the length of segment GC (prime factored)? _____
16. How many planes were created? _____

17. Name the planes created: _____, _____, _____, _____, _____

18. Are any of the planes a quadrilateral (if so name the plane)? _____

19. How many of the planes are polygons? _____

20. What is the relationship between the slopes for line GC and segment CD?

21. What is the relationship between the slopes for segment CD and ray EH?

22. What conjecture can you make regarding line GC and segment CD?

23. What conjecture can you make regarding segment CD and ray EH?

Keywords: Distance Postulate, Slope, points, segments, rays, lines, planes, Parallel, Perpendicular, Quadrilateral, polygon, conjecture, coordinates and coordinate plane.