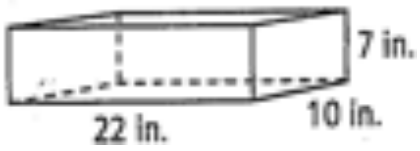
Geometry

8/6 Assignment

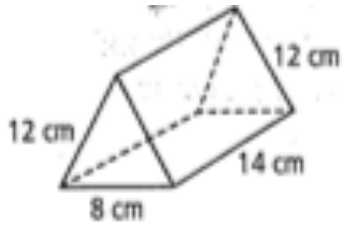
Complete all of the problems on a separate piece of paper. This may be done in a notebook and brought to class on Monday 8/3.

For #1 and 2, draw a net for each figure. Label the net with its dimensions.

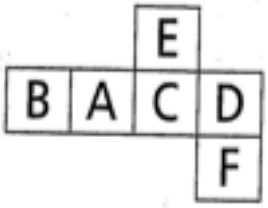
1.



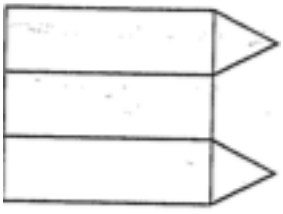
2.



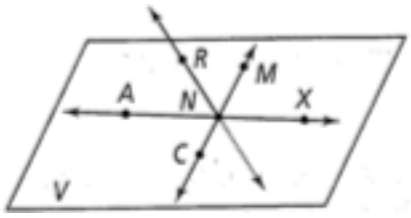
3. If the net shown at the right is folded so that side A in the front of the cube, what letters will be on the top, bottom, right, left, and back?



4. Someone drew the net below of a triangular prism. Will this create a prism? Explain.



Use the figure below for numbers 5-12. Note that $\overleftrightarrow{RN}$ passes through the plane at *N*. It is not coplanar with *V*.



5. Name two segments shown in the figure.

6. What is the intersection of $\overleftrightarrow{CM}$ and $\overleftrightarrow{RN}$?

7. Name three collinear points.

8. What are two other ways to name the plane *V*?

9. Are points *R, N, M,* and *X* coplanar?

10. Name two rays shown in the figure.

11. Name the pair of opposite rays with endpoint *N*.

12. How many lines are shown in the drawing?

Graph the points and state whether they are collinear.

13. (0,0), (4, 2), (6, 3)

14. (0, 0), (6, 0), (9, 0)

15. (-1, 1), (2, -2), (4, -3)

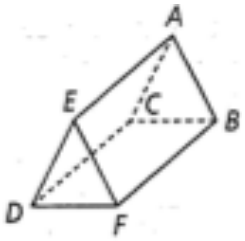
16. (1, 2), (2, 3), (4, 5)

17.

Look at the figure at the right. Where do planes *ACE* and *BCD* intersect?

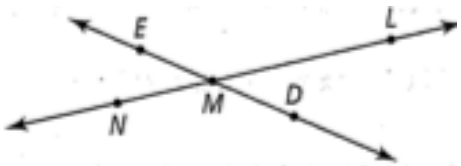
(A) $\overleftrightarrow{AD}$ (C) $\overleftrightarrow{CB}$

(B) $\overleftrightarrow{CD}$ (D) $\overleftrightarrow{BF}$



18.

In the figure at the right, which line is the same as $\overleftrightarrow{ED}$?



(A) $\overleftrightarrow{ML}$ (C) $\overleftrightarrow{NL}$

(B) $\overleftrightarrow{DM}$ (D) $\overleftrightarrow{MN}$

19.

If two lines are coplanar, which of the following must be true?

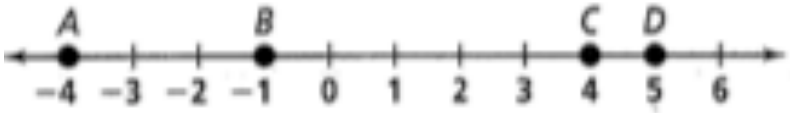
(F) The lines intersect.

(G) The lines never intersect.

(H) All points on the lines are coplanar.

(J) The lines share at least one point.

For numbers 20-25, use the figure below. Find the length of each segment.



20. AB 21. BC 22. AC

23. AD 24. BD 25. CD

Use the figure below for numbers 26 and 27.

26.

Given: $ST = 3x + 3$ and $TU = 2x + 9$.

a. What is the value of ST?

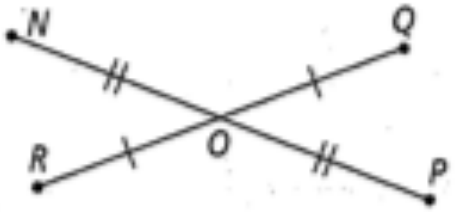
b. What is the value of TU?

27.

Given: $ST = x + 3$ and $TU = 4x - 6$.

a. What is the value of ST? **b.** What is the value of SU?

Use the diagram below for numbers 28-32.



28. If $NO = 17$ and $NP = 5x - 6$, find the value of x. Then find NP and OP.

29. If $RO = 6 + x$ and $OQ = 2x + 1$, find the value of x. Then find RO, OQ, and RQ.

30. If $NO = 3x + 4$ and $NP = 10x - 10$, find the value of x. Then find NO, NP, and OP.

31. If $RO = 5x$ and $RQ = 12x - 20$, find the value of x. Then find RO, OQ, and RQ.

32. What term describes the relationship between $\overline{NP}$ and $\overline{RQ}$?