Geometry Name: Devion Hill

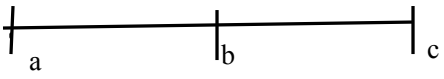
Unit 2 Review

Section 2.1

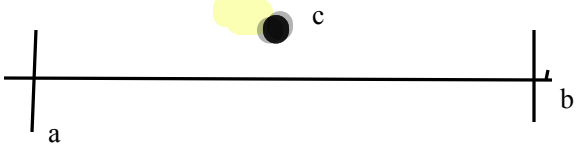
1. Explain what it means for points to be collinear.

Three or more points that are said to be collinear if they lie on the same line.

2. Draw an example of 3 collinear points.

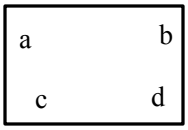


3. Draw an example of 3 noncollinear points.



4. Explain what it means for points to be coplanar. Draw an example.

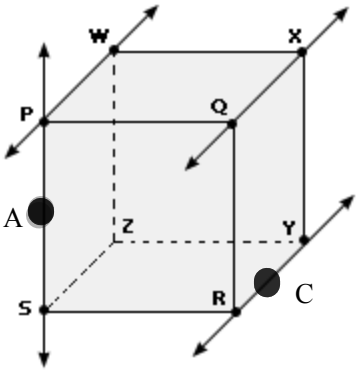
a set of points in space are coplanar if there exists a geometric plane that contains them all



points a,b,c and d are coplanar

5. a.) Are points P, Q, and X coplanar?

yes



b.) Are points W, Z, R coplanar?

no

c.) Are points Y, S, R coplanar?

yes

d.) The intersection of $\vec{SP}$ *and* $\vec{PW}$

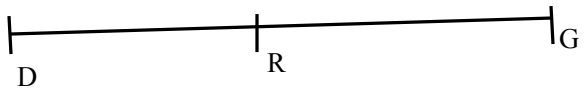
p

e.) Add a point A to the figure so that P, A, & S are collinear.

f.) Add a point C to the figure so that R, C, and Y are collinear.

Section 2.2

6. Draw what it means for point R to be between points D and G.



7. *R*, *S*, and *T* are collinear. *S* is between *R* and *T*. $RS = 2w + 5$, $ST = w - 2$, and $RT = 21$.

Determine the length of $\overline{RS}$.

DRAW THE PICTURE



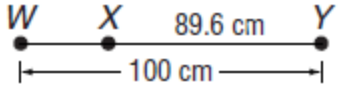
$\overline{RS}$= 17

8. You have a line segment that is split into two (not equal) pieces. You know the length of the original segment and the length of the smaller piece. Explain how you would find the length of the larger piece.

you would take the original piece amount and substract the smaller amount from that. This gives you the amount of the unknown piece

Find the length of the indicated segment.

9. $\overline{WX}$ 10.4 cm



Section 2.3

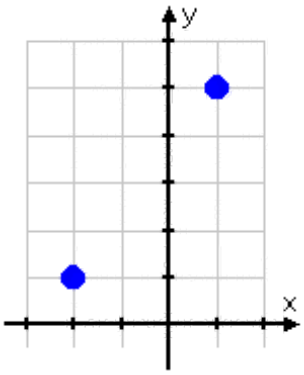
10. State the distance formula.

is used to find the distance between two points in the plane

11. State the midpoint formula.

measure the distance between the two end points and divide the results by 2

12. Find the distance between the two points.



5.83

13. Find the midpoint of segment AB: A(4, 8) and B(-6, 0).

(-5,4)

14. Find the endpoint Y of segment XY given the midpoint M(2, 3) and one endpoint X(-6, 0).

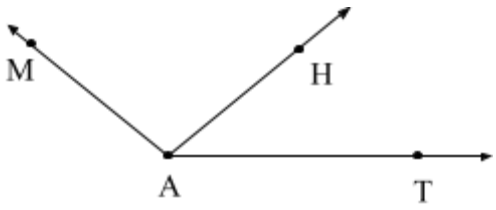
(10,6)

Section 2.4

15. Assume a segment is bisected, you know the length of the original segment. Explain how you can find the length of each of the smaller pieces.

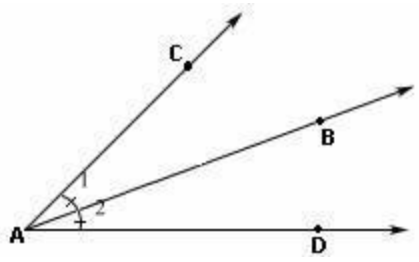
take the length of the whole segment divide by the number of segments to get the length of each segment

16. If $m\angle MAH = 83°$ and $m\angle HAT = 47°$ then find $m\angle MAT$ and tell whether it is acute, obtuse, straight or right.



MAT=130° its an obtuse angle because its greater than 90°

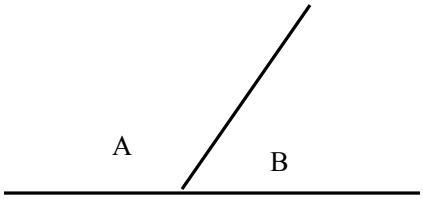
17. If m $\angle$ 2= 24, then the m $\angle$ 1=? 24 Also, $\overset{\sqcup\sqcup\sqcup}{AB}$ is an acute angle ?



Section 2.5

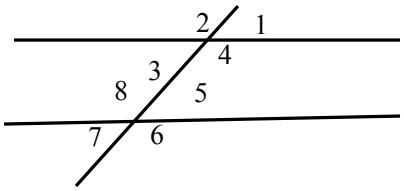
18. What is a linear pair? Draw an example.

linear pair is a adjacent angles formed when two lines intersect

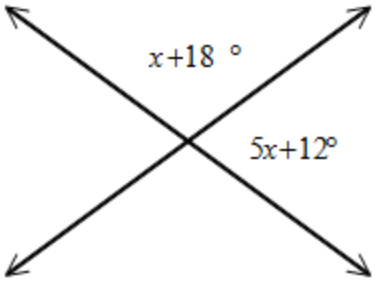


19. Draw an example of vertical angles. What do we know special about vertical angles?

vertical angles are a pair of opposite angles formed by intersecting lines



20. Solve for x:



X=25°

21. $\angle A$ and $\angle B$ are supplementary. The m $\angle A$ is 18 more than the m $\angle B$. Find the measure of each angle.

angle A =99°

angle B =81°

22. $m \angle FDE = (2x + 7)^\circ$ and $m \angle CDE = (5x + 1)^\circ$ and $m \angle FDC = 64^\circ$.

Find $m \angle FDE$ and $m \angle CDE$.

Angle FDE=23°

Angle CDE=41°

