1) Draw line AB with collinear point R intersecting ray XY at point P.

2) Draw segment CD intersecting plane M at point R

3) Draw two lines that are coplanar but not intersecting.

**Use the diagram below to answer questions #4-9.**

4) Name an angle vertical to < 1

8

7

 5) Name an angle supplementary to < 7

9

12

11

6

5

2

 6) Name a pair of complementary angles.

3

10

1

4

 7) Name an angle adjacent to < 10

 8) Name an angle congruent to < 8

9) Name a linear pair of angles.

**Classify the following angles as acute, right, obtuse or straight.**

10) 11) 10. \_\_\_\_\_\_\_\_\_\_\_\_\_

 11.\_\_\_\_\_\_\_\_\_\_\_\_\_

**Find the length of the segment and the midpoint of the segment with the given endpoints.**

12)  A (-4, 5), B (6, -1) 12. Length\_\_\_\_\_\_\_\_\_

 Midpoint\_\_\_\_\_\_\_\_

13)  C (0, 3), D ( 8, 1) 13. Length \_\_\_\_\_\_\_\_

Midpoint\_\_\_\_\_\_\_

14) Given the midpoint B (3, -1) of segment AC and the other endpoint, A ( -4, 5), find the location of the *other endpoint*, point C.

 14. C = ( )

15) Point B lies between points A and C on segment AB. AB = 12 inches, BC= 4x + 5 inches and

 AC = 45 inches.

Draw and label: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is the value of X?

What is the length of BC?

**If  bisects ABC, solve for x.**

 16a.\_\_\_\_\_\_\_\_\_\_\_\_\_

(2x+24)º

(3x - 12)º

16a) 16b)

(2x)º

(x + 15)º

D

A

•

•

D

•

 16b.\_\_\_\_\_\_\_\_\_\_\_\_\_

•

B

•

B

C

C

•

A

**Find the missing angle measures (each question is a different scenario)**

17) If m2 = 25º, then m1 = \_\_\_\_\_\_\_\_\_. 17. \_\_\_\_\_\_\_\_\_\_\_\_

4

1

3

2

18) If m3 = 95º, then m4 = \_\_\_\_\_\_\_\_\_. 18. \_\_\_\_\_\_\_\_\_\_\_\_

3

2

1

4

19) If m4 = 130º, then m2 = \_\_\_\_\_\_\_\_\_. 19. \_\_\_\_\_\_\_\_\_\_\_\_

4

3

2

1

**Find the value of each variable.**

38º

(2y + 4)º

(3y – 65)º

20)

 20. y = \_\_\_\_\_\_\_\_\_\_\_\_

(2y – 10)º

(3x + 1)º

 (y + 10)º

21) 21. x = \_\_\_\_\_\_\_\_\_\_

 y = \_\_\_\_\_\_\_\_\_\_

$$3x+1$$

22) 22. x = \_\_\_\_\_\_\_\_\_

$$2x-6$$

 y = \_\_\_\_\_\_\_\_\_

$$3y-3$$