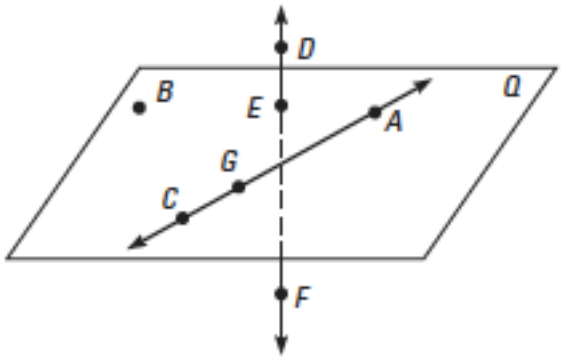
Name:_____ **Cumulative Review 1-2**
Period:_____ **Geometry**

In # 1-6, use the diagram to answer each question. (1.1)

1. Give another name to plane Q.
2. Give three different names for $\overleftrightarrow{DF}$.
3. Name three points that are collinear.
4. Are $\overline{DE}$ and $\overline{ED}$ the same line segment?
5. Are $\overleftrightarrow{GC}$ and $\overleftrightarrow{CG}$ the same ray?
6. Name two pairs of opposite rays.

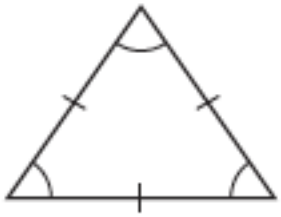


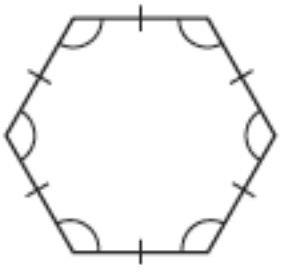
In #7-8, find the midpoint of $\overline{PQ}$ using the given coordinates. Then Find the length of $\overline{PQ}$ using the given coordinates. Round to the nearest tenth. (1.3)

7. $P(-2,0), Q(5,-3)$

8. $P(1.2,8), Q(3.5,-6.1)$

In #9-11, classify the polygon by the number of sides. Tell whether it is convex or concave. Then tell whether it is equiangular, equilateral, regular, or not enough info. (1.7)

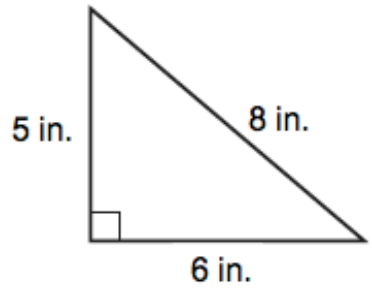
9. 

10. 

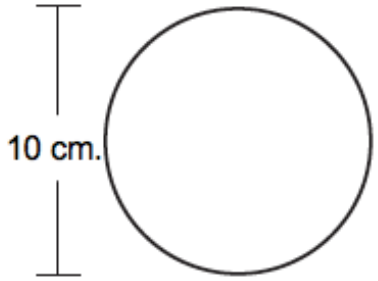
11. 

In #12-13, find the perimeter (or circumference) *and* area of the polygon. (1.7)

12.



13.



14. Describe the pattern and write the next term in the sequence. (2.1)

1, $-\frac{1}{3}, \frac{1}{9}, -\frac{1}{27}, \ldots$

15. Give a counterexample which shows the conjecture, "If $x^2=4$, then $x=2$" is false. (2.2)

16. Write the statement "All dogs bark," as an if-then, converse, inverse, and contrapositive. (2.2)

If-Then:_____

Converse: _____

Inverse: _____

Contrapositive: _____

17. Write the definition of a midpoint as a biconditional statement. (2.2)

Biconditional: _____

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18. Use the Law of Detachment to make a valid conclusion from the true statement, "If $m\angle A < 90°$, then $\angle A$ is acute, $m\angle A < 90°$." (2.3)

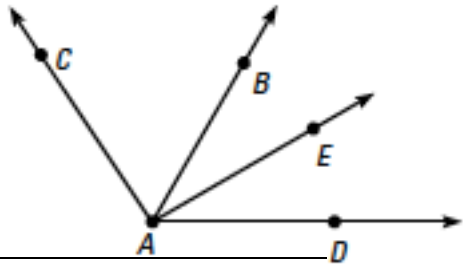
Conclusion: _____

19. Illustrate an example of Postulate 8 by drawing a diagram. (2.4)
Postulate 8: _____
Illustration:

20. Sketch planes *P*, *Q*, and *R* intersecting in $\overleftrightarrow{AC}$. (2.4)

21. Solve the equation $9x + 3 = 21$ and give a reason for each step. (2.5)

22. Write a two-column proof showing that if $\overrightarrow{AB}$ bisects $\angle CAD$ and $\overrightarrow{AE}$ bisects $\angle BAD$ then $m\angle CAD = 4m\angle EAD$. (2.6)



Statements	Reasons

23. Find all missing angle measures in the diagram below. (2.7)

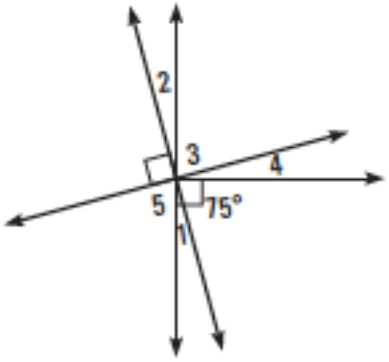
$m\angle 1 =$

$m\angle 2 =$

$m\angle 3 =$

$m\angle 4 =$

$m\angle 5 =$



For #24-31, lines $\overleftrightarrow{AC}$ and $\overleftrightarrow{FE}$ intersect in point *B* in the diagram. (2.7)

24. Name a pair of obtuse vertical angles.

25. Identify a linear pair

26. Give another name for $\angle FBC$.

27. Find the value of *x*.

28. What is $m\angle DBE$?

29. Name a pair of supplementary angles which are not a linear pair.

30. One angle in the diagram is bisected by a ray. Name that angle and that ray.

31. Name a pair of congruent angles.