

Geometry Test 4 Mr. Holcomb 2008/2009

Best thing to do on Sat. _____

Problem

1. (5 points) Find the distance between $A:(-5,4)$ and $B:(3,6)$. Justify by showing clear work.

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2. (5 points) Suppose point A is located at $(-8,-7)$ and point B is located at $(-3,-3)$. What is the location the midpoint of \overline{AB} ? Justify by showing clear work.

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3. (5 points) Suppose point A is located at $(-2,2)$ and the midpoint of \overline{AB} is located at $(3,-2)$. What is the location of point B ? Justify by showing clear work.

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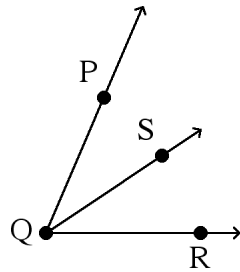
4. (8 points) On \overline{AB} , point C is between points A and B . Furthermore $AC = 5x + 8$, $CB = 2x - 10$, and $AB = 33$.

a. Make a drawing of this situation. Label the important information.

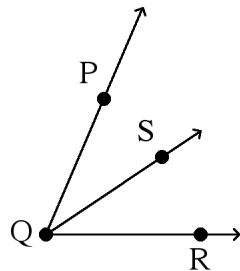
b. What is the length \overline{AC} ?

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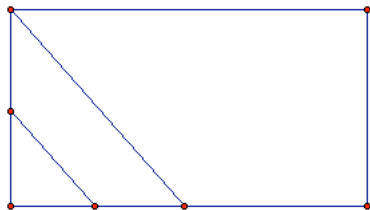
5. (6 points) $m\angle RQS = 3x + 12$, $m\angle SQP = 5x + 2$, and $m\angle PQR = 34^\circ$.
- Label the drawing with the given information.
 - Find the value of x .



6. (6 points) \overrightarrow{QS} is the angle bisector of $\angle PQR$, $m\angle RQS = 4x + 7$, and $m\angle PQR = 26^\circ$.
- Label the drawing with the given information.
 - Find the value of x .

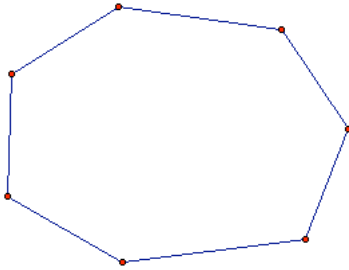


7. (6 points) Consider the shape below. Find the number of shapes that have the given sum of interior angles.



- Number of shapes with a total of 180° _____
 Number of shapes with a total of 360° _____
 Number of shapes with a total of 540° _____

8. (4 points) What is the sum of the interior angles of the shape shown below? Justify your answer.



Model Drawing Problem.

- 1) Read the problem completely. (2 points)
 - 2) Draw a model. Label the model with the given information. Remember “Recipe Reading”. (4 points)
 - 3) Define a base unit. (2 points)
 - 4) Place your “?”. (2 points)
 - 5) Work your computation. (4 points)
 - 6) Write a complete sentence to answer the question. (2 points)
9. (14 points) The x and y coordinates of all points in this problem are integers. Point A is on the positive y -axis. Point B is on the positive x -axis. Point C 's x -coordinate is equal to its y -coordinate. Points A and B are both $\sqrt{20}$ away from point C . What is the distance from point A to point B ?

