

Name: _____

Mrs. Jacknis

Date: _____

Midterm Review

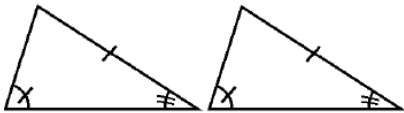
Review for Midterm #3

Directions: Answer each question completely. Show all work Write your final answer on line provided. Answers with no work will not receive hw credit.

1) The incenter of a triangle is the points of concurrency of what lines of a triangle?

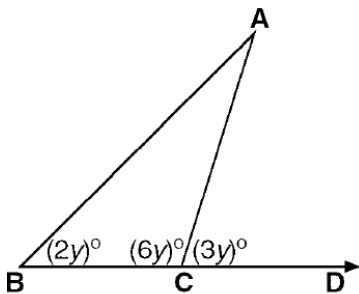
Answer: _____

2) What is the congruence correspondence, if any, that will prove the give triangles congruent?



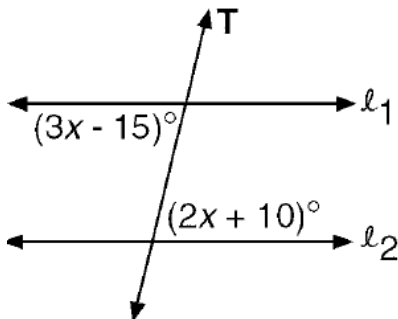
Answer: _____

3) In the accompanying diagram of $\triangle ABC$, side \overline{BC} is extended to D, $m\angle B = 2y^\circ$, $m\angle BCA = 6y^\circ$, and $m\angle ACD = 3y^\circ$. What is $m\angle A$?



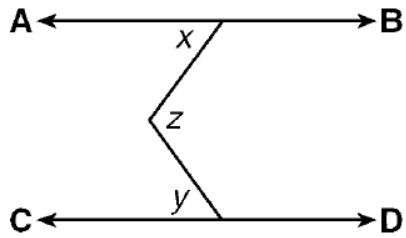
Answer: _____

4) What is the value of x that makes $l_1 \parallel l_2$?



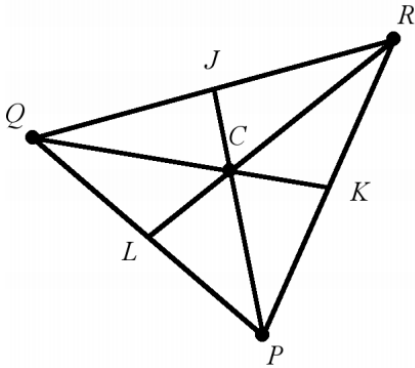
Answer: _____

5) In the accompanying diagram, $\overline{AB} \parallel \overline{CD}$, $m\angle x = 50^\circ$, and $m\angle y = 60^\circ$. What is $\angle z$?



Answer: _____

6) Point C is the centroid of triangle PQR below. If $RL = 15$, what is CL ?



Answer: _____

7) What is the image of point $(3, 4)$ when reflected in the y -axis?

Answer: _____

8) What are the coordinates of point P , the image of point $(3, -4)$ after a reflection in the line $y = x$?

Answer: _____

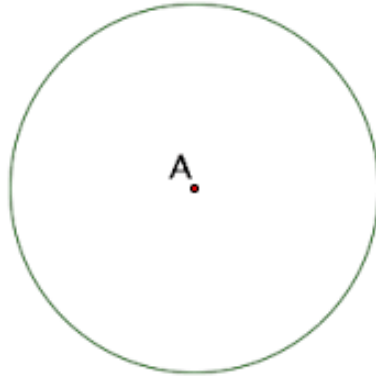
9) What is the image of point $(-3, -1)$ under a R_{180° ?

Answer: _____

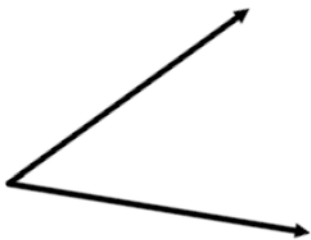
10) A translation moves $P(3, 5)$ to $P'(6, 1)$. What are the coordinates of the image of point $(-3, -5)$ under the same translation?

Answer: _____

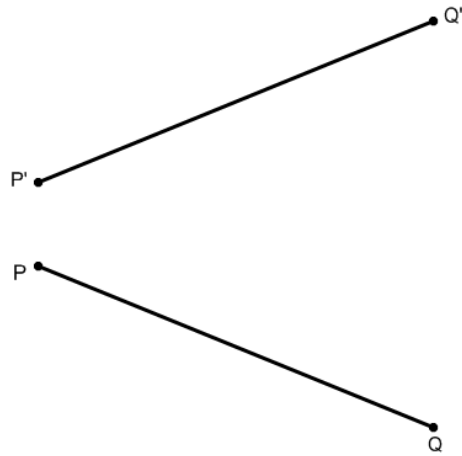
11) Construct a square inscribed in the circle given below.



12) Bisect the angle below.



13) 6) $\overline{P'Q'}$ is the image of \overline{PQ} after a line reflection. Use a compass and straightedge to construct the line of reflection.



14) Construct the center of rotation for the transformation given below.

