Geometry Review for Learning Check 4

1. Write an equation of a line parallel to 5x+2y=11 through the point (4, -3).
2. Are the lines parallel, perpendicular or neither? Explain.

2x+3y=7

-6x+4y=15

1. Find the measure of the angle labeled ?



1. LK bisects $∠JKP$ and QK bisects $∠PKM.$ Find the measure of $∠PKQ$.



1. $∠ROT=123$ degrees. Find the measure of $∠SOP $and $∠POT.$



In the

1. In the picture below angle 8 measures 120 degrees.  Find the **sum** of angle 7 and angle 15.



1.  **Given**: B is the midpoint of AC

    **Prove**: y=9

1. What other information to do need to prove the triangles are congruent using ASA?



1. What other information do you need to prove the triangles are congruent by SAS?



1. What other information do you need to prove the triangles are congruent by HL?



1. M is the midpoint of KQ. What 2 congruence theorems could be used to prove the triangles are congruent? Explain.



1. Draw a parallelogram ABCD.
	1. Which pairs of angles are congruent?
	2. Which pairs of angles are supplementary?
2. What is the sum of the measures of the exterior angles in a triangle? In a pentagon?
3. What is the sum of the measures of the interior angles in a triangle? In a pentagon?
4. Find the measure of angle A.





1. Are the triangles similar? Explain.



1. Suppose you live at point (1,3) on a coordinate grid. There are two chic fi la’s located near your house. One is at (-2,4) and the other is at (5,7). Which one is closer?
2. Find the midpoint f (5,7) and (1,3).
3. Dilate the given triangle by a scale factor of 2. Give the coordinates for the new triangle A’B’C’ and graph the image.



1. Explain why ABC and A’B’C’ (from question 20) are similar using similarity criteria.