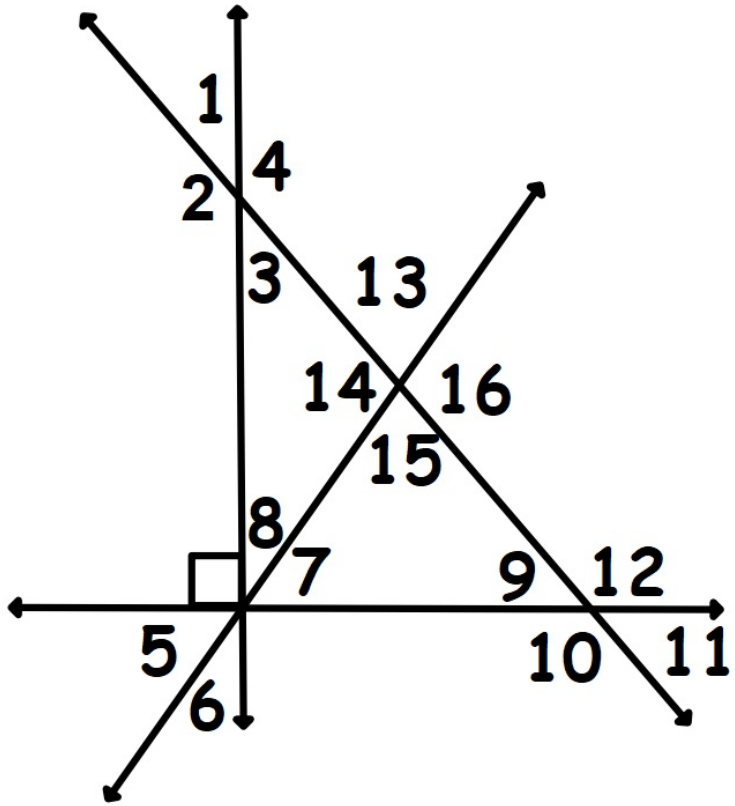
Accelerated Math Practice Problems
(Sections 11.1-11.3)

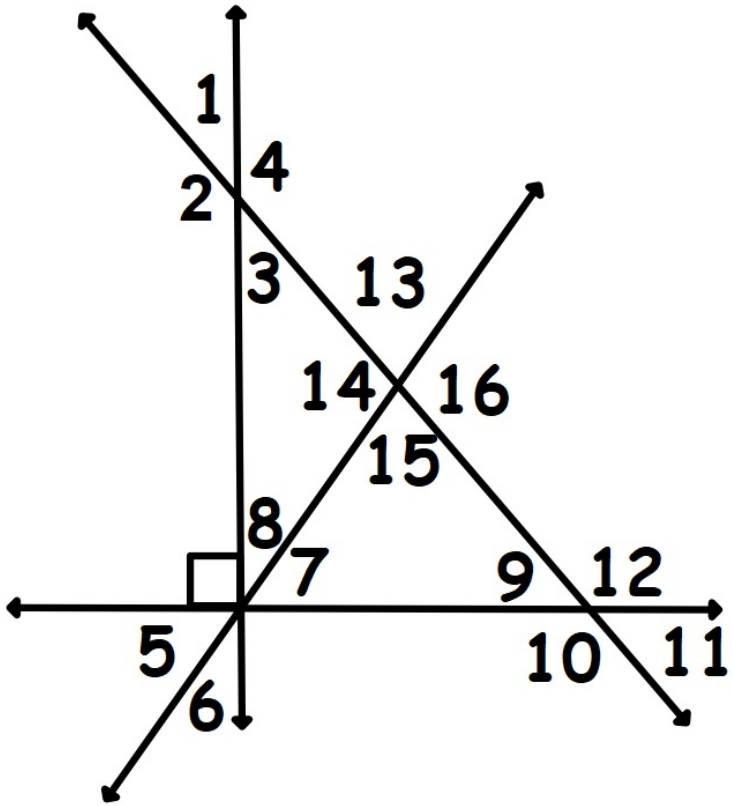
Name_____
Block ____ Date_____

1) Find the m < 16 IF
m <7 = 40 and m<1 = 30.
Show reasoning in a steps and reasons chart



Steps	Reasons

2) If m<12 = 130 and m<6 = 25, find m<3.
Show reasoning in a steps and reasons chart.

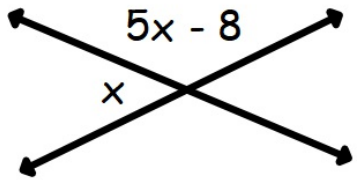


Steps	Reasons

3) Find the measure of each angle in a regular heptagon. Round to the nearest tenth.

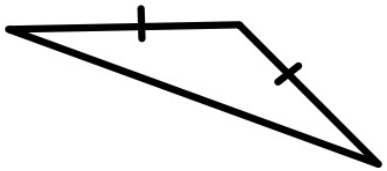
4) The sum of the angles in a polygon is 9720 degrees. How many sides does the polygon have?

5) Write and solve an equation to find the measure of the angle measured x

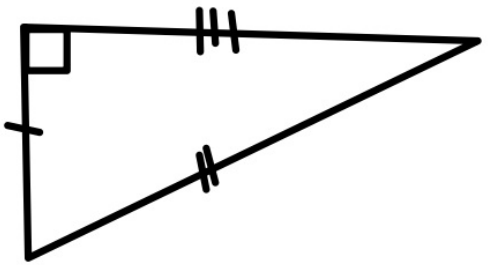


6) Classify these triangles by angles and by sides.

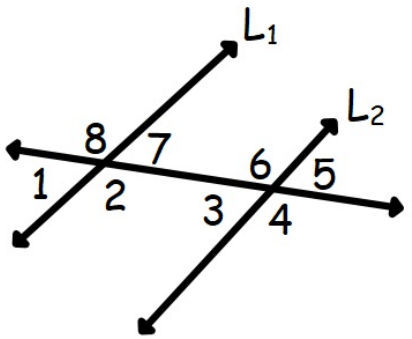
A)



B)



7) If L_1 is parallel to L_2 name these <u>pairs</u> of angles.



A) <8 and <2 _____

B) <1 and <3 _____

C) <5 and <1 _____

D) <3 and <7 _____

8) In the diagram above, m<8 = 6x + 5 and the m<6 = 2x + 9. Find the m<8 Write an equation and solve it. Explain the reasoning behind how(why) you wrote your equation.

9) The four angles of a quadrilateral are in the ratio of 1:2:4:5. Define a variable, write an equation, solve it to find the measures of all four angles.

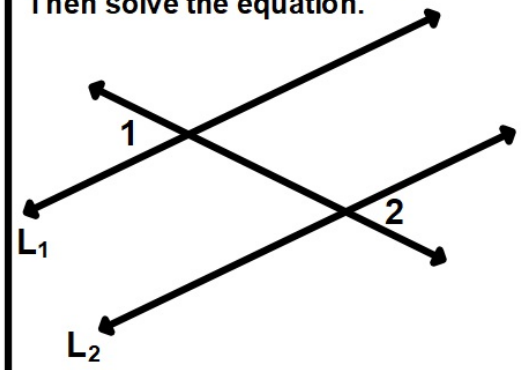
10) Find the sum of the measures of the interior angles of a polygon with 25 sides.

11) Is it possible to make a triangle with side lengths of 4cm, 6cm, and 2cm. Why or why not?

12) Two sides of a triangle are 25 cm and 12 cm. Write an inequality in this format to show all possibilities for the third side.

☐ < third side < ☐

13) In this diagram, L_1 is parralel to L_2,
m<1 = 3x + 15 and m<2 = 11x - 1.
Write an equation that be used to find the measures of angles 1 and 2. Explain the reasoning behind writing your equation. Then solve the equation.



x =

m < 1 =

m < 2 =

14) Write an equation to find the value of x. Then solve.