Geometry Lomac 2015-2016 **Date** 9/30 **due** 10/1 **Angles: 360, 180, and vertical** **2.1L**

Name _____ **Per**_____

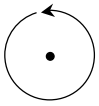
LO: I can identify **angle relationships** involving adjacent and vertical angles and use the relationships to solve for unknown values .

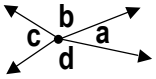
☐ **DO NOW** On the back of this packet

☐ (1) **Need to Know: Angles at a point or on a line**

What do we know about angles already?

☐ (a) The number of degrees around a point is _____.

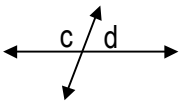




☐ (b) The sum of the **adjacent angles around a point** is _____

***a* + *b* + *c* + *d* =** _____

☐ (c) The number of degrees in a **straight angle** is _____.



☐ (d) Two **adjacent angles** that form a line are called a **linear pair**

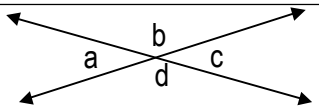
The sum of two angles on a straight line is _____.

The angles are also called _____.

***c* + *d* =** _____

☐ (d) **Vertical angles** are across from each other when 2 lines intersect.

Vertical angles are always _____.



***a* =** _____

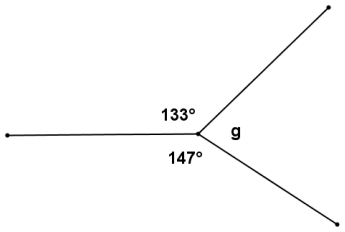
***b* =** _____

☐ (2) **Angles: Using relationships**

transparencies, dry erase markers, erasers

Use what you have stated in problem number 1 to find the measure of each unknown angle. Write an equation and solve it.

☐ (a) Determine the measure of angle *g*.



m∠*g* = _____ because _____

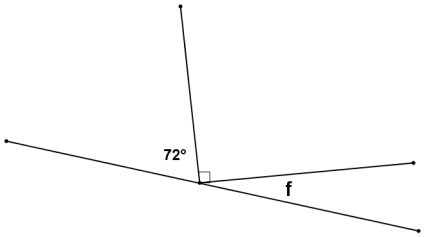
_____

_____

_____

_____

☐ (b) Determine the measure of angle *f*.



m∠*f* = _____ because _____

_____

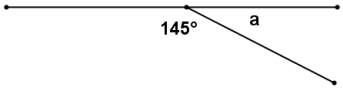
_____

_____

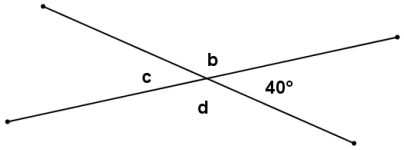
_____

☐ (3) **Angles: Using Relationships**

☐ Use what you have stated in problem number 2 to find the measure of each unknown angle. Write an equation and solve it.



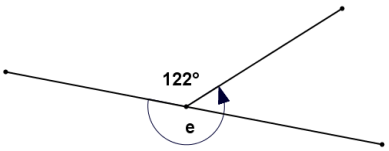
m∠*a* = _____ because _____



m∠*b* = _____ because _____

m∠*c* = _____ because _____

m∠*d* = _____ because _____

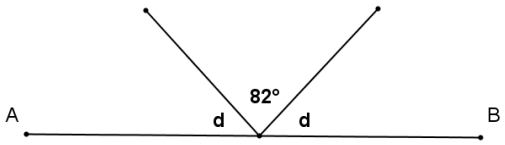


m∠*e* = _____ because _____

☐ (4) **Angles: Use relationships to solve problems**

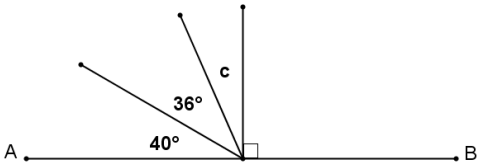
Identify a relationship, write an equation or equations, solve for each variable.

☐ (a)



d = _____ because _____

☐ (b)

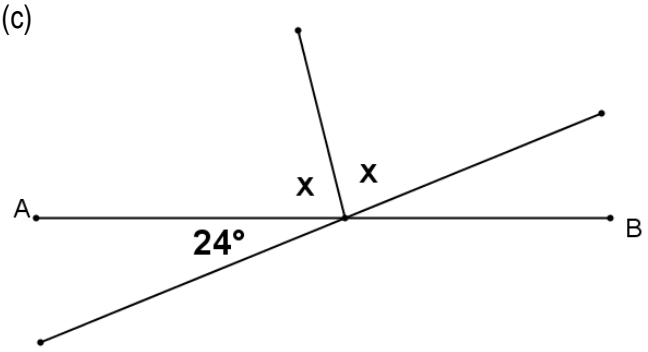


c = _____ because _____

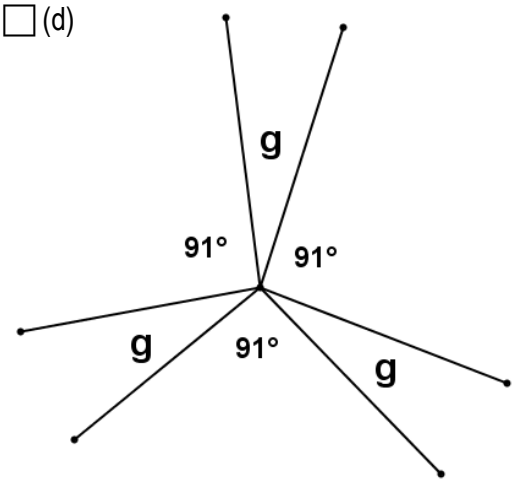
☐ (4) cont. **Angles: Use relationships to solve problems**

Identify a relationship, write an equation or equations, solve for each variable.

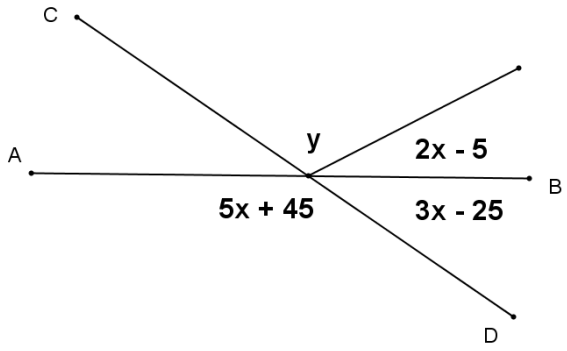
☐ (c)



☐ (d)



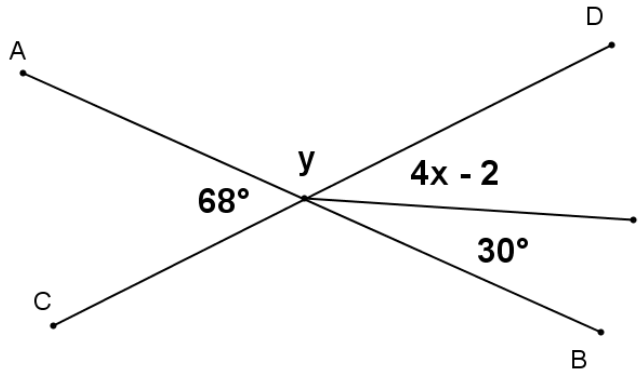
☐ (e)



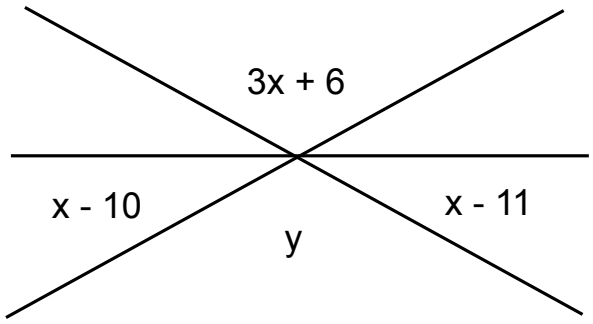
☐ (4) cont. **Angles: Use relationships to solve problems**

Identify a relationship, write an equation or equations, solve for each variable.

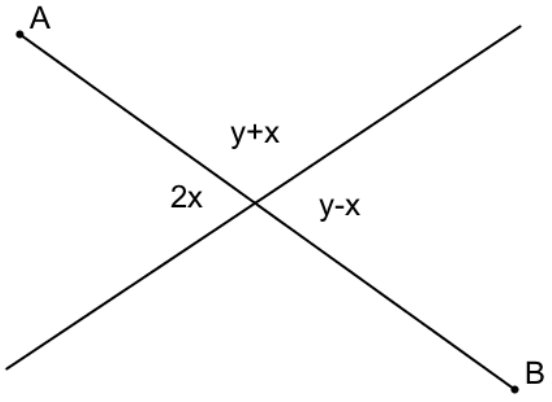
☐ (f)



☐ (g)



☐ (h)



☐ (5) **Exit Ticket**

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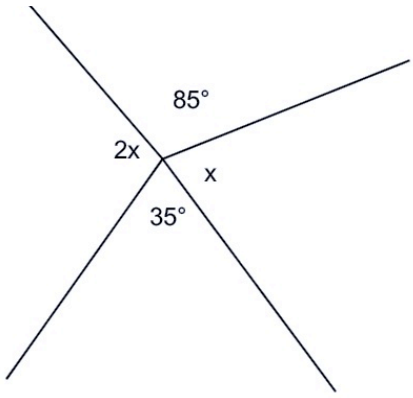
☐ (6) **Homework**

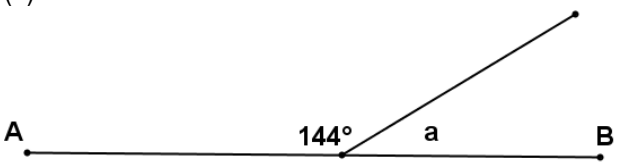
pen or pencil

Identify a relationship, write an equation or equations, solve for each variable.

(1)



(2)



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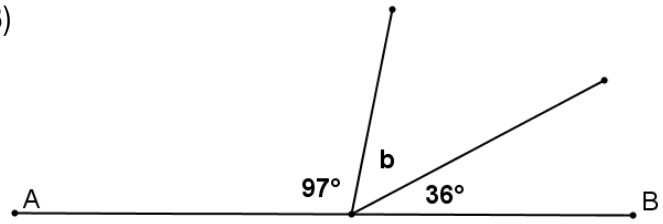
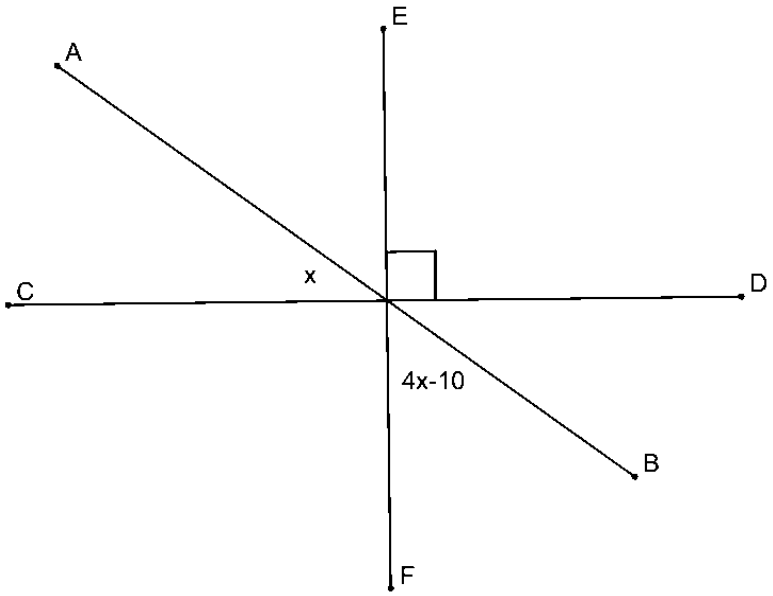


☐ (6) pen or pencil **Homework**

Identify a relationship, write an equation or equations, solve for each variable.

(4)



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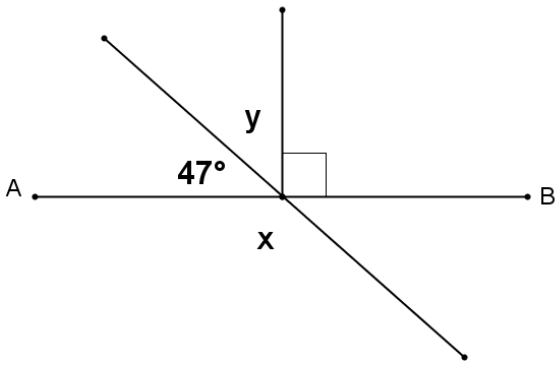
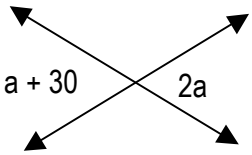
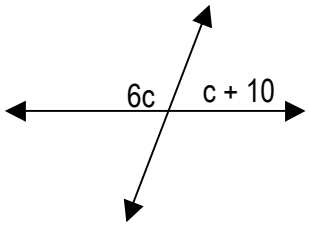


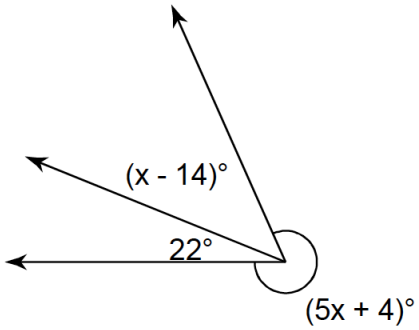
Exit Ticket **Name**_____ **Date** _____ _____ **Per**_ _____ **2.1L**

(1) The LO (Learning Outcomes) are written below your name on the front of this packet. Demonstrate your achievement of these outcomes by doing the following:

Find the measures of a, c and x. Identify a relationship, write an equation, and solve for the variable.







DO NOW **Name**_____ **Date** _____ **Per**_____ **2.1L**

(1) Solving progress: Solve one of the two problems below.

(a) $4m - 30 = 7 - (7 - 5m)$ (b) $14 - 8d + 5d = 12 - d$

(2) Translation to algebra progress. Yanique needs at least $750 to go on a trip. She earns $6.00 an hour doing odd jobs. She has already saved $400. She also got $50 for her birthday that she put towards the trip. Write an algebraic statement to represent this situation. Be sure to write a "Let" statement to define any variables.