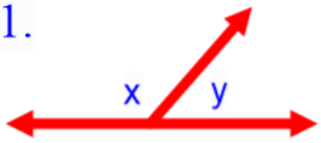
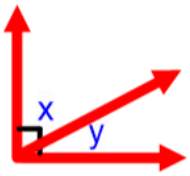
PRACTICE – RECOGNIZING ANGLE RELATIONSHIPS – 1 NAME _____

For each diagram below, give the name of the special angle pair, as well as the relationship (complementary, supplementary, congruent, or "none"). Then, give an appropriate equation based on the diagram.

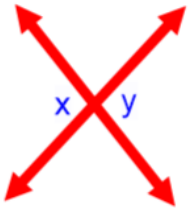
1.



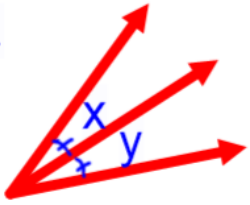
2.



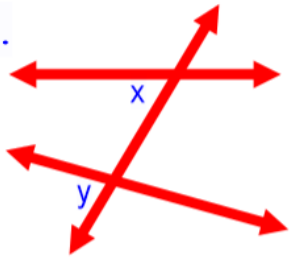
3.



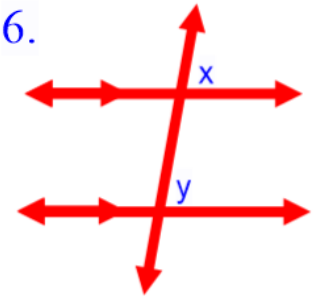
4.



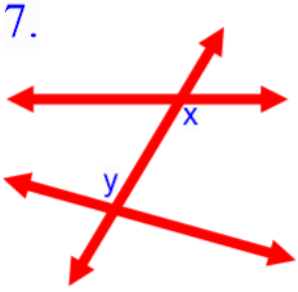
5.



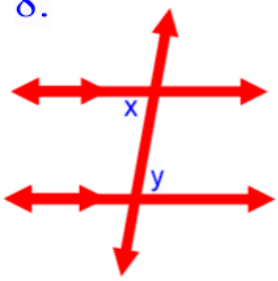
6.



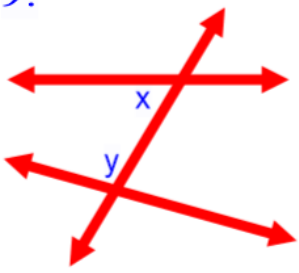
7.



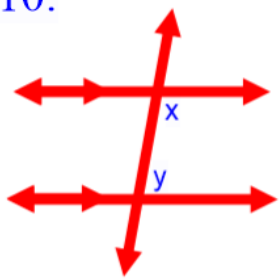
8.



9.



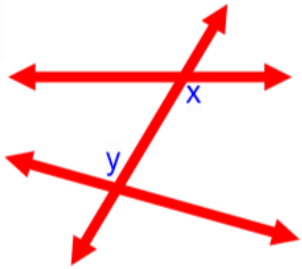
10.



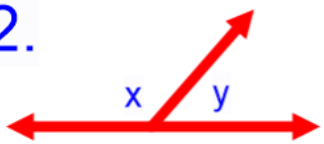
PRACTICE – RECOGNIZING ANGLE RELATIONSHIPS – 2 NAME _____

For each diagram below, give the name of the special angle pair, as well as the relationship (complementary, supplementary, congruent, or "none"). Then, give an appropriate equation based on the diagram.

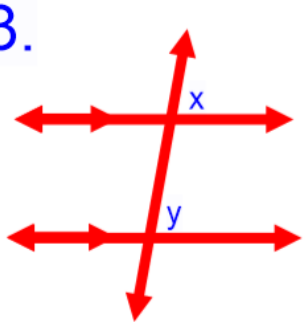
1.



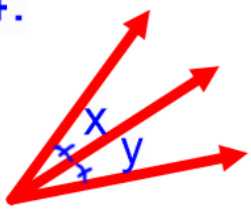
2.



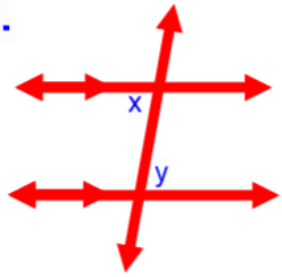
3.



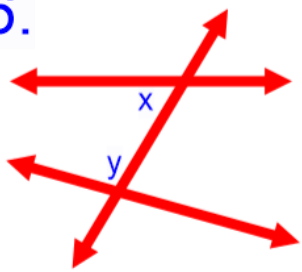
4.



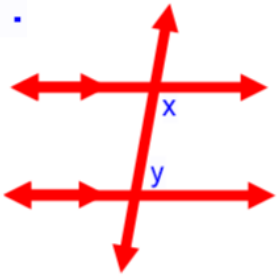
5.



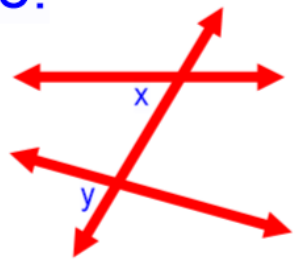
6.



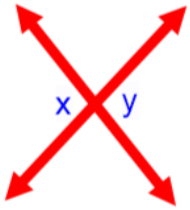
7.



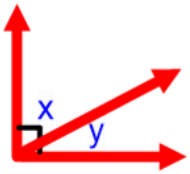
8.



9.



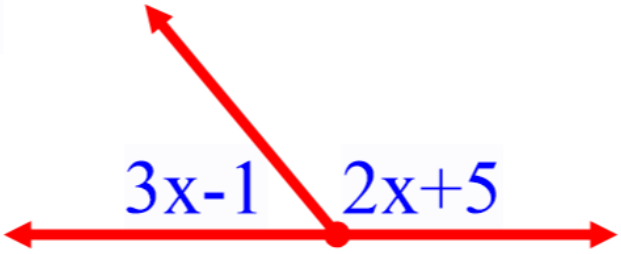
10.



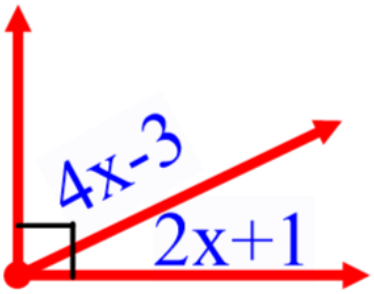
PRACTICE – WRITING EQUATIONS/ANGLE RELATIONSHIPS – 1 NAME _____

For each diagram below, write and solve an equation based on the relationship of the angles. Justify your work using correct terminology – give the name of the special angle pair, as well as the relationship (complementary, supplementary, congruent, or "none"). Then find the measures of each angle in the diagram.

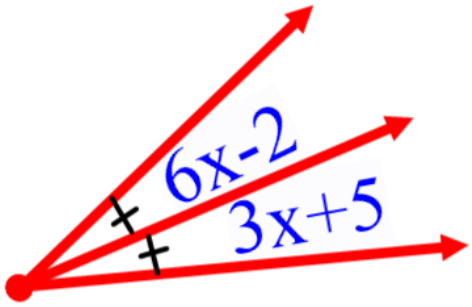
A.



B.



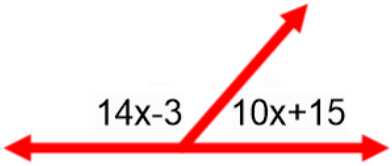
C.

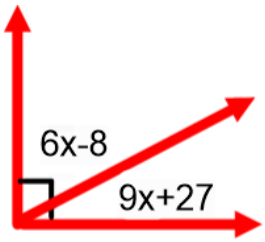


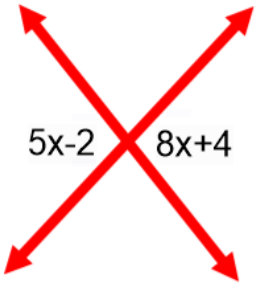
D.

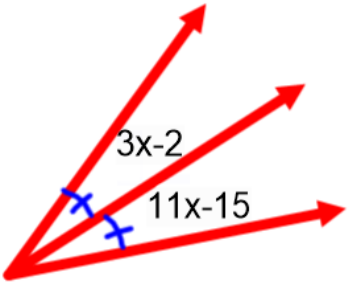
PRACTICE – WRITING EQUATIONS/ANGLE RELATIONSHIPS – 2 NAME _____

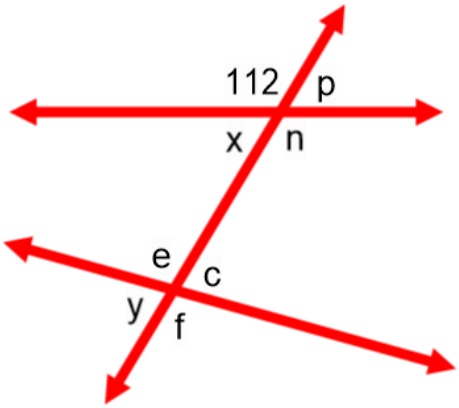
For each diagram below, write and solve an equation based on the relationship of the angles. Justify your work using correct terminology – give the name of the special angle pair, as well as the relationship (complementary, supplementary, congruent, or "none"). Then find the measures of each angle in the diagram.

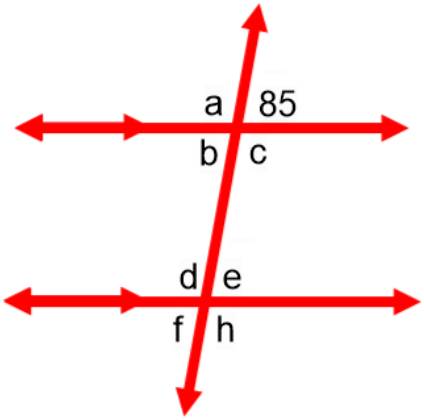






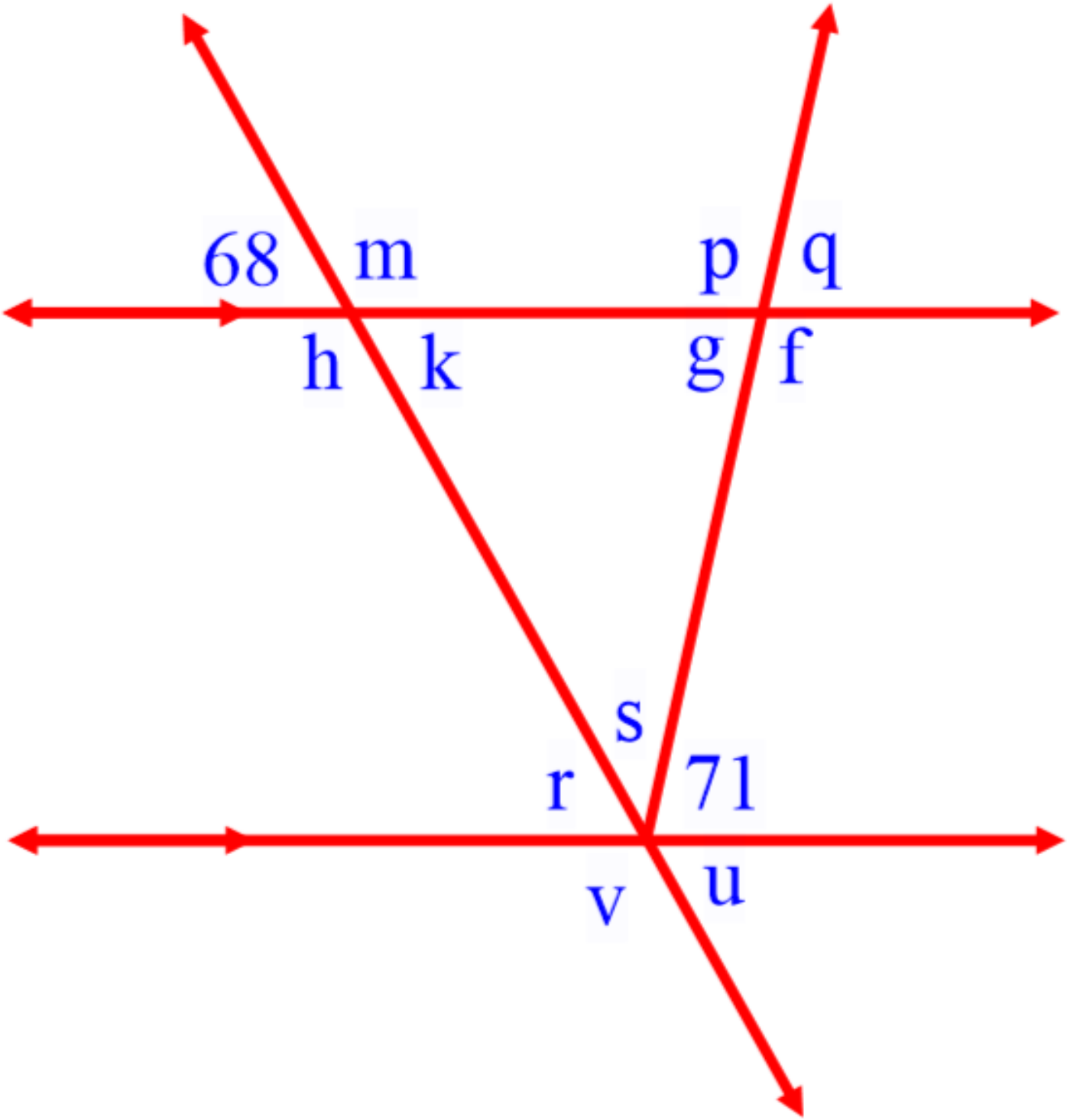






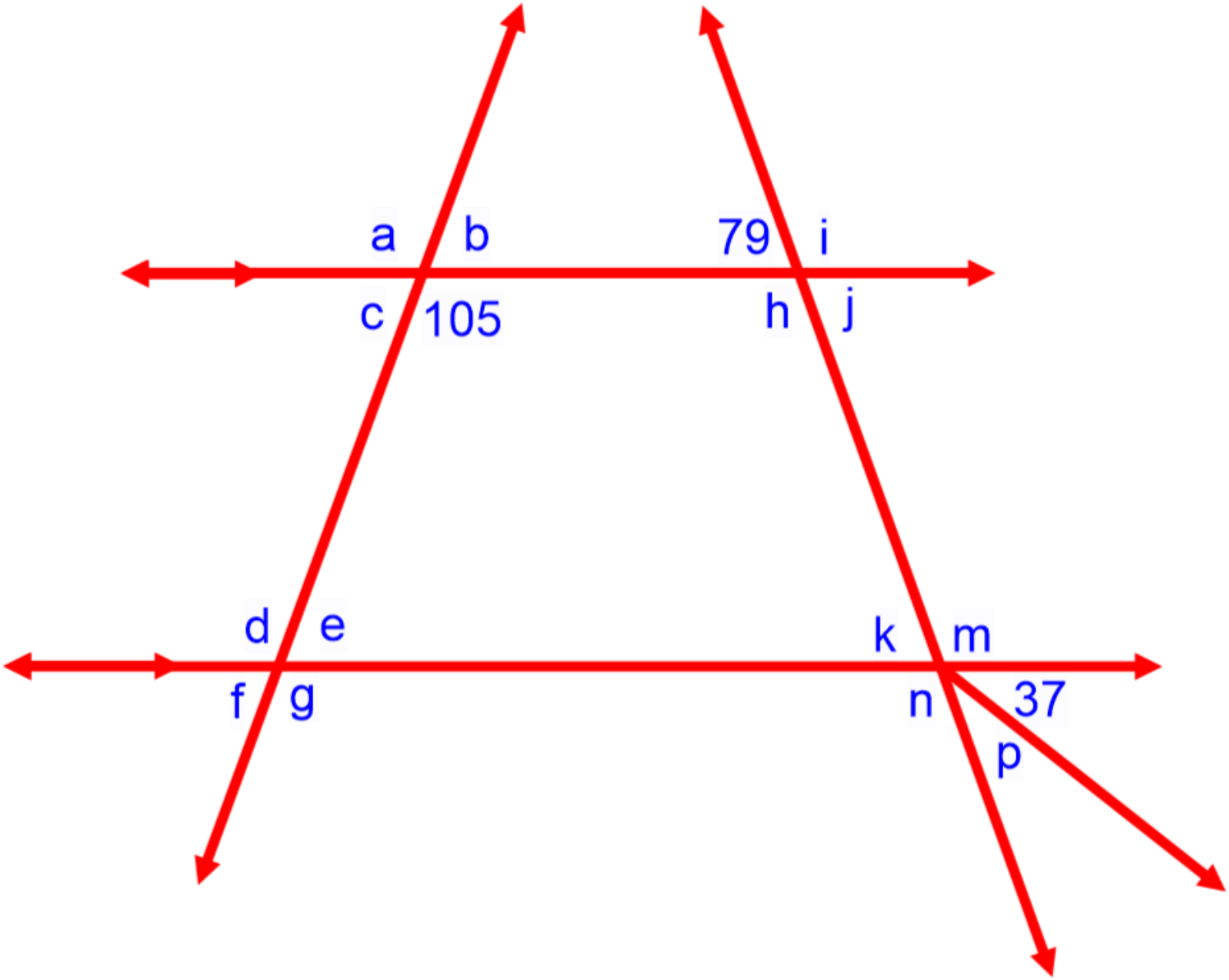
PRACTICE – ANGLE RELATIONSHIPS – BIG DIAGRAM – 1 **NAME _____**

Find the measure of each angle in the diagram below. Justify it by using the special angle pair names and their relationships. You can say things like "alternate interior with *b* and lines parallel, so congruent."



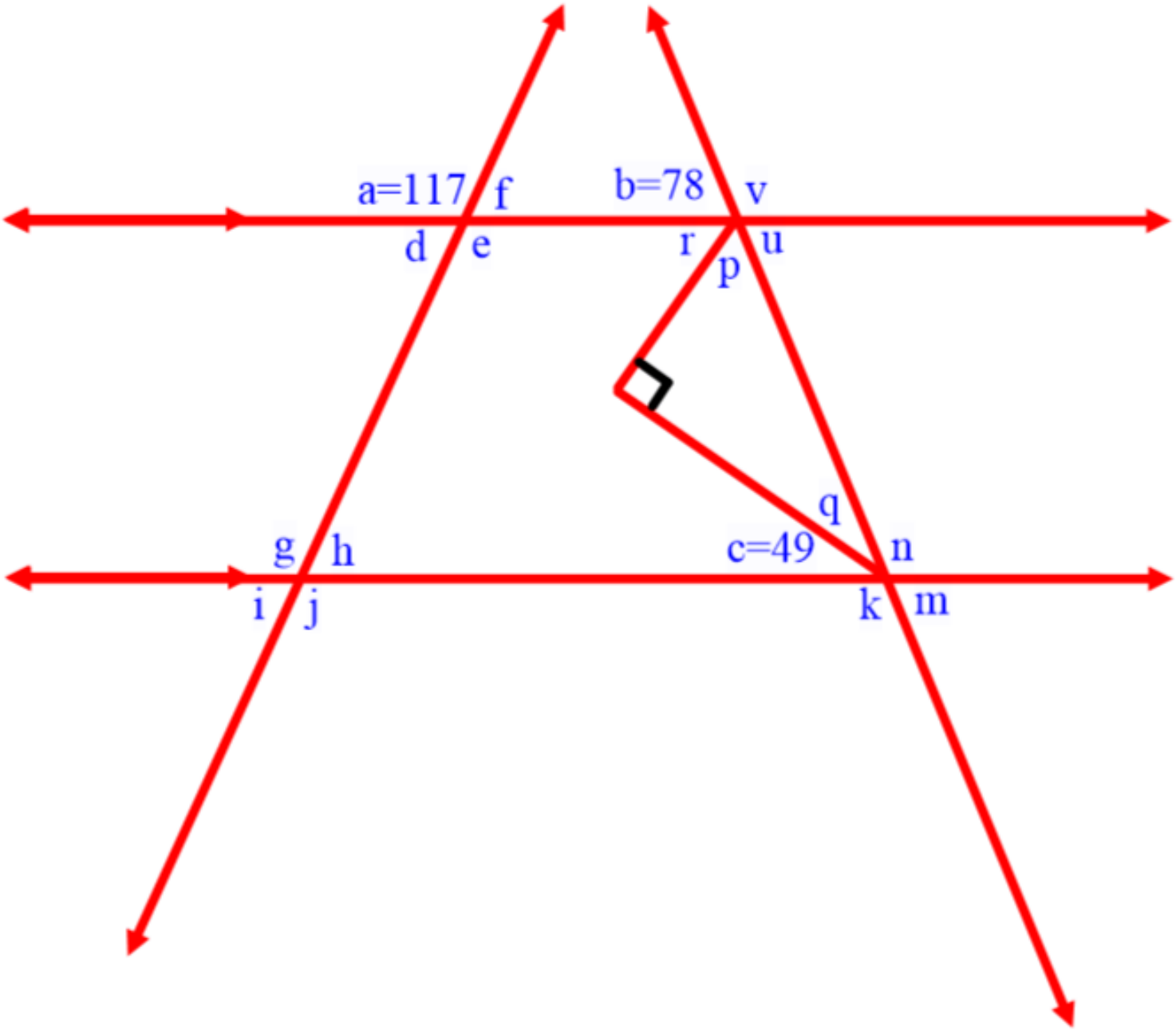
PRACTICE – ANGLE RELATIONSHIPS – BIG DIAGRAM – 2 **NAME** _____

Find the measure of each angle in the diagram below. Justify it by using the special angle pair names and their relationships. You can say things like "alternate interior with *b* and lines parallel, so congruent."



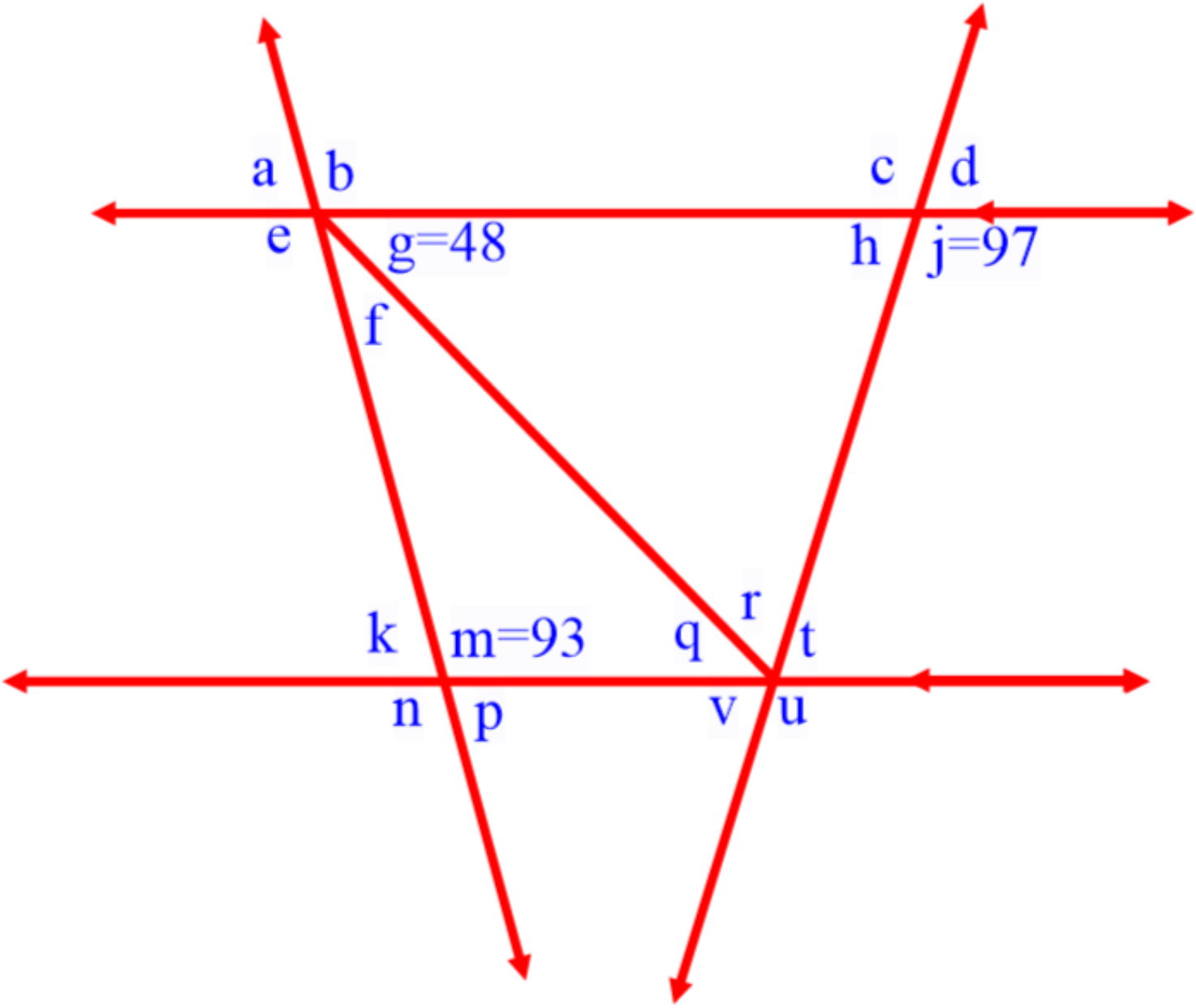
PRACTICE – ANGLE RELATIONSHIPS – BIG DIAGRAM – 3 **NAME _____**

Find the measure of each angle in the diagram below. Justify it by using the special angle pair names and their relationships. You can say things like “alternate interior with *b* and lines parallel, so congruent.”



PRACTICE – ANGLE RELATIONSHIPS – BIG DIAGRAM – 4 **NAME _____**

Find the measure of each angle in the diagram below. Justify it by using the special angle pair names and their relationships. You can say things like "alternate interior with *b* and lines parallel, so congruent."



PRACTICE – ANGLE RELATIONSHIPS – 2 Name _____

In your own words, write a description of each angle relation below. You may use pictures to **HELP** with your description.

1. Same-Side Interior Angles

2. Vertical Angles

3. Corresponding Angles

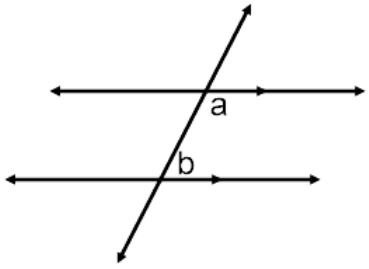
4. Alternate Interior Angles

For each picture, give the name of the special angle pair (vertical, same-side interior, corresponding, alternate interior, straight angle pair, right angle pair, adjacent, or adjacent congruent). Then give the relationship (congruent, complementary, or supplementary). Be sure to include if the relationship is only true because there are parallel lines. Then give an equation that could be written based on the picture.

5. name _____

relationship _____

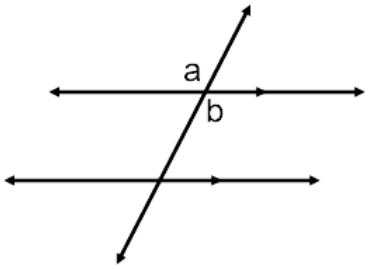
equation _____



6. name _____

relationship _____

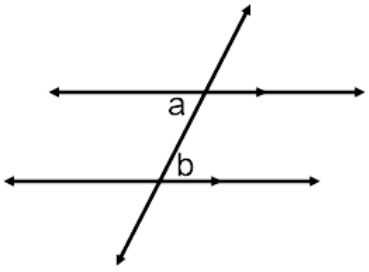
equation _____



7. name _____

relationship _____

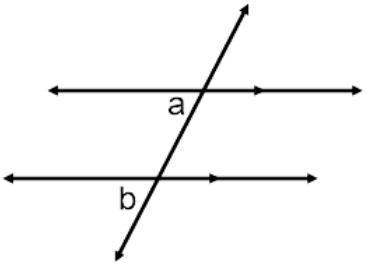
equation _____



8. name _____

relationship _____

equation _____



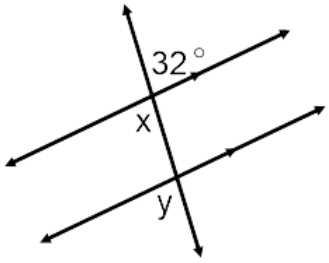
Find the value of *x* and *y*, **<u>if possible</u>**, and state the relationship you used (you can write things like: *x* and 63 are corresponding, *y* and 54 are vertical angles, *z* and 71 are a straight angle pair, etc.).

9. *x* = _____ because_____

_____

Y = _____ because _____

_____

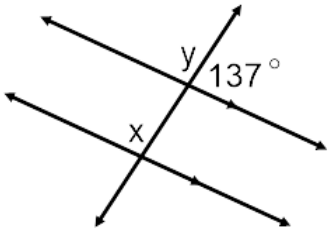


10. *x* = _____ because_____

_____

Y = _____ because _____

_____

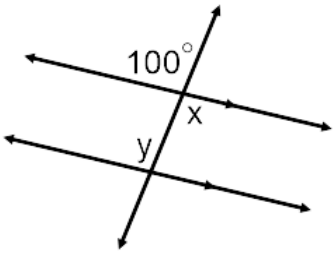


11. *x* = _____ because_____

_____

Y = _____ because _____

_____

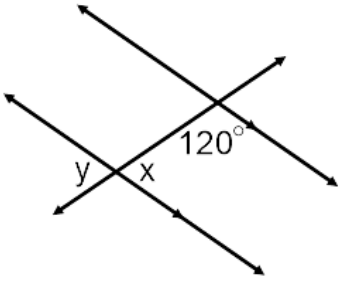


12. *x* = _____ because_____

_____

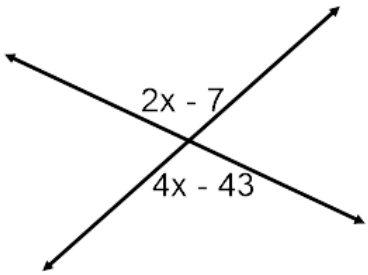
Y = _____ because _____

_____

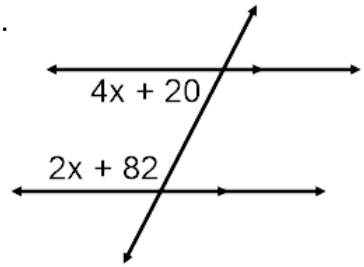


For each of the following pictures, write an equation based on the picture, then solve for *x*. **SHOW ALL WORK!**

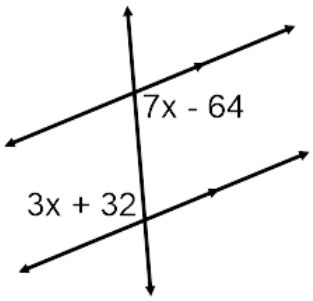
13.



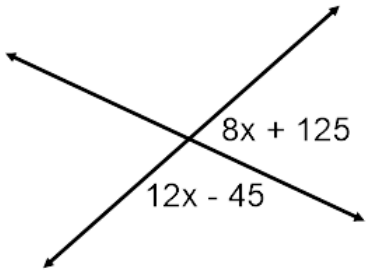
14.



15.

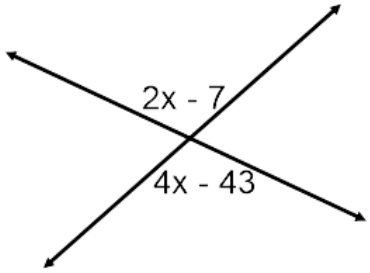


16.

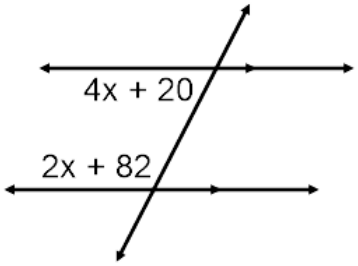


Now, using the values you found for *x* in questions 13 – 16, find the measures of all of the angles in each diagram (note: these are the **same** pictures…).

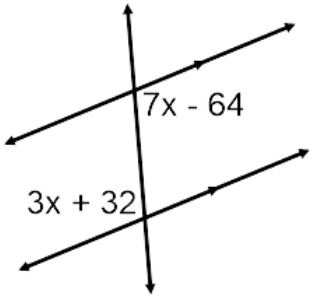
17.



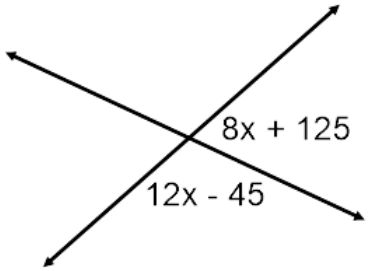
18.



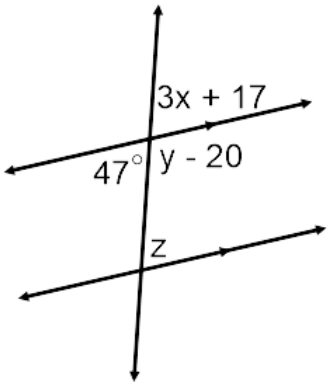
19.



20.



Find the values of *x*, *y*, and *z*. Then explain how you found each value.



21. *x* = _____

22. *y* = _____

23. *z* = _____