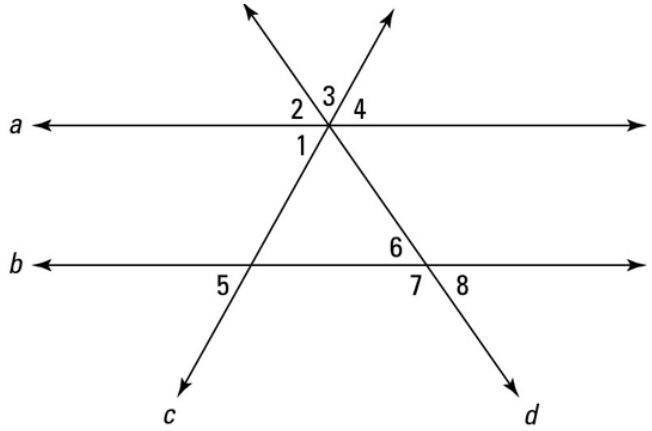
Math Plus Name: _____

Unit 10 Lesson 2 Homework

Use the figure below to answer 1-6. Consider <u>line *c*</u> to be a transversal intersecting lines *a* and *b*.



1. Name a pair of alternate interior angles.

2. Name a pair of same-side interior angles.

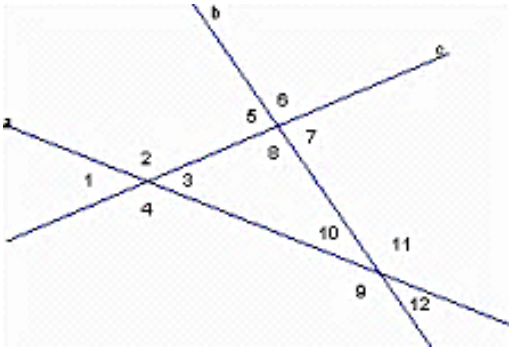
3. Name a pair of alternate exterior angles.

4. Name a pair of same-side exterior angles.

5. Name 2 pairs of corresponding angles.

6. Name 2 pairs of vertical angles.

Given: $m\angle 10 = 40°$, $m\angle 8 = 80°$ ...



7. How are $\angle 10$ and $\angle 12$ related? What is $m\angle 12$?

8. What is $m\angle 1$?

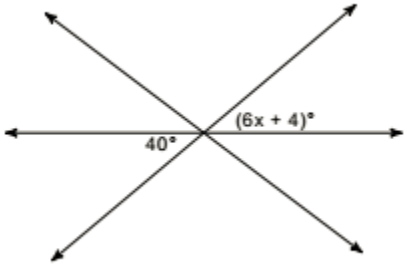
9. How are $\angle 8$ and $\angle 7$ related? What is $m\angle 7$?

10. What is $m\angle 6$?

11. Find the measure of all remaining angles.

Which type of <u>angle pair</u> exists? Use the relationship formed by this angle pair to find the value of x.

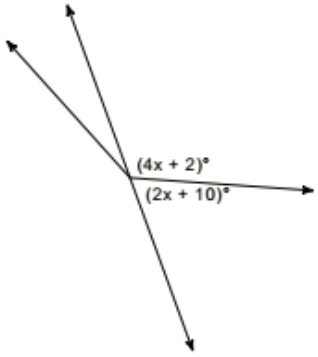
12.



Type: _____

x = _____

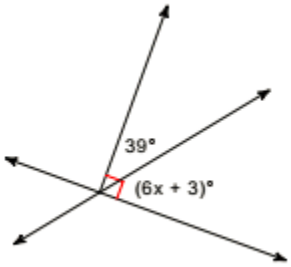
13.



Type: _____

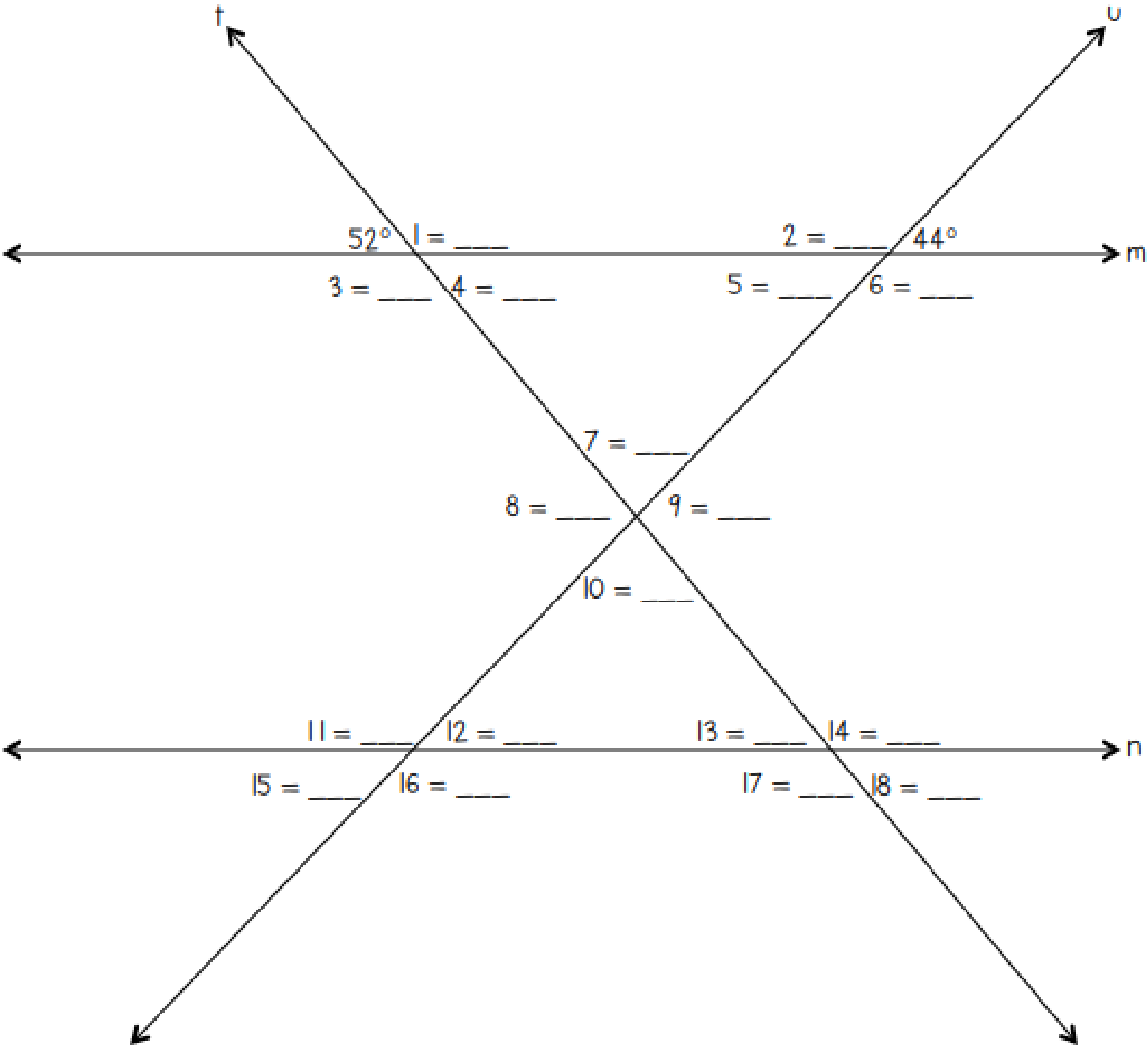
x = _____

14.



Type: _____

x = _____

Parallel Lines Cut by a Transversal

Directions: Determine the measure of each of the labeled angles given that lines m and n are parallel.