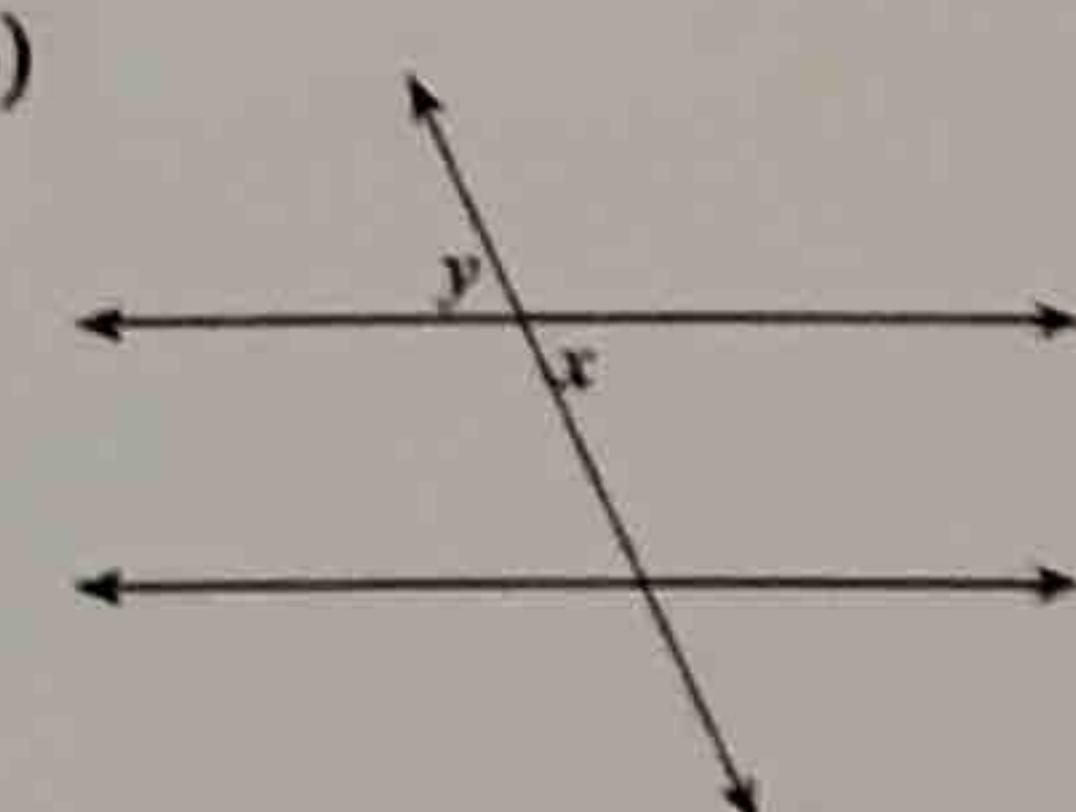
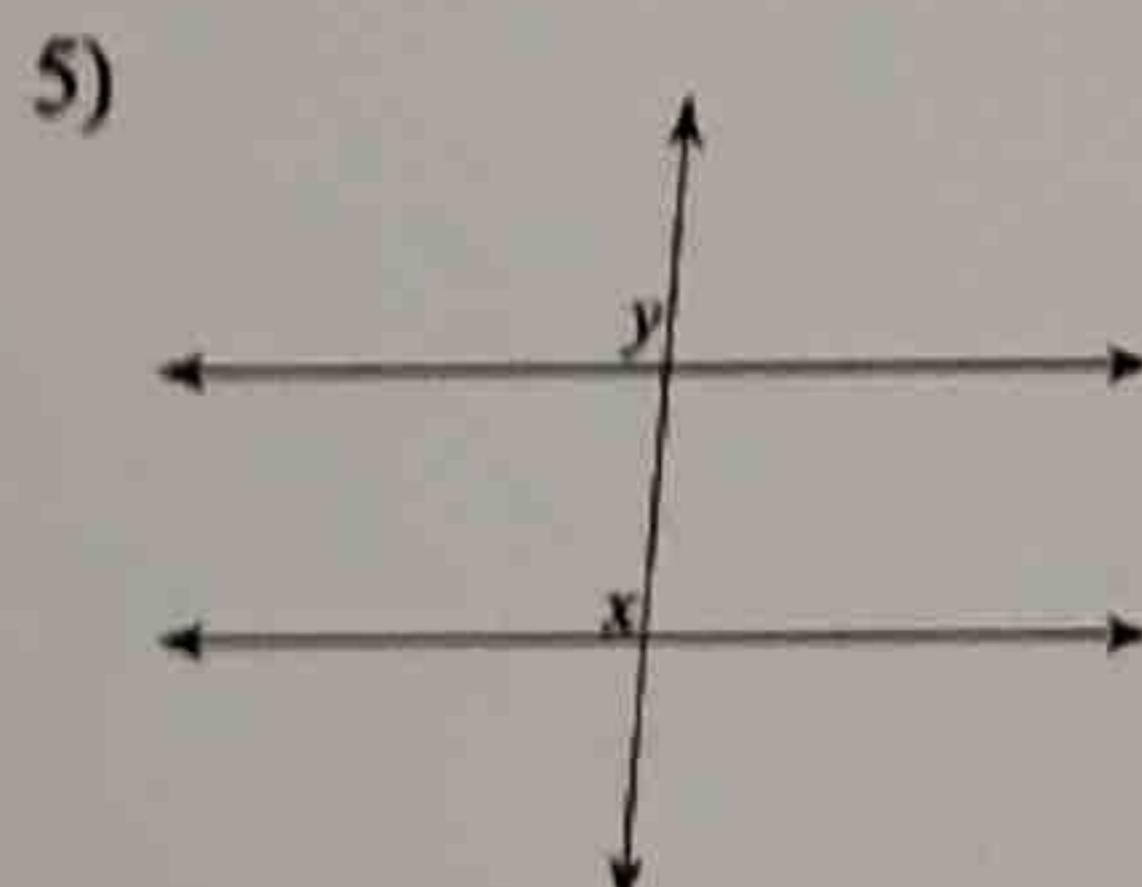
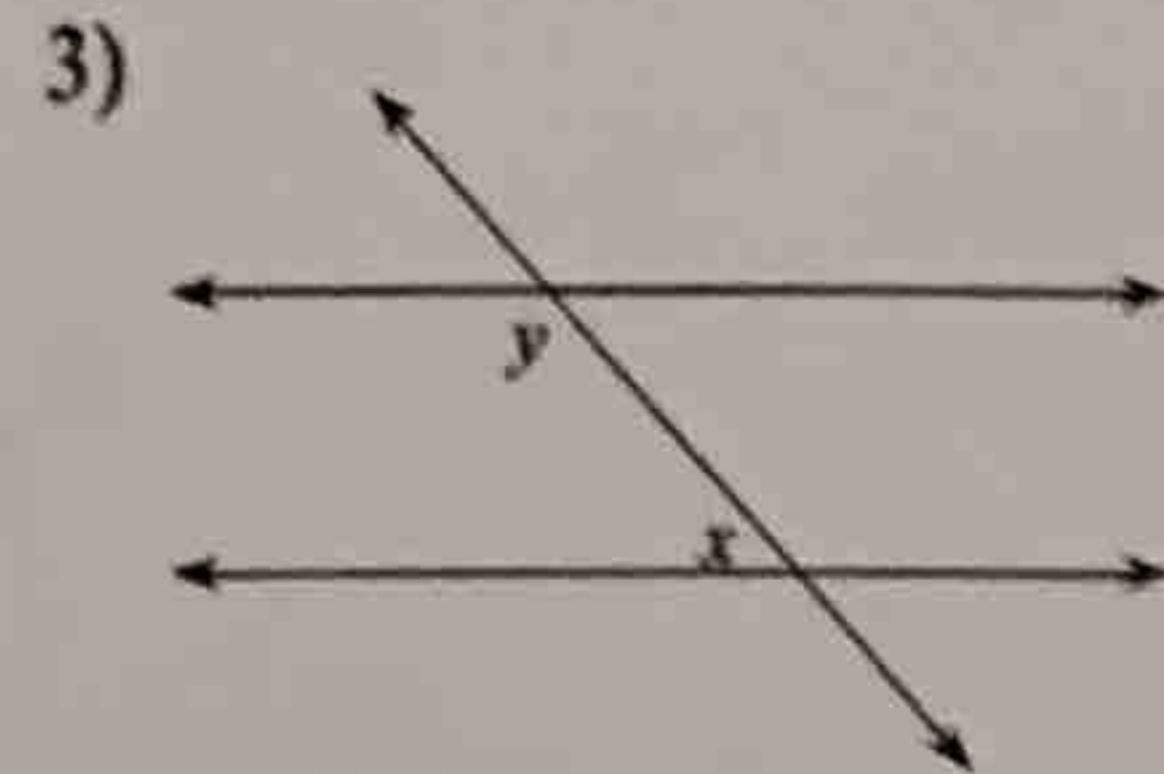
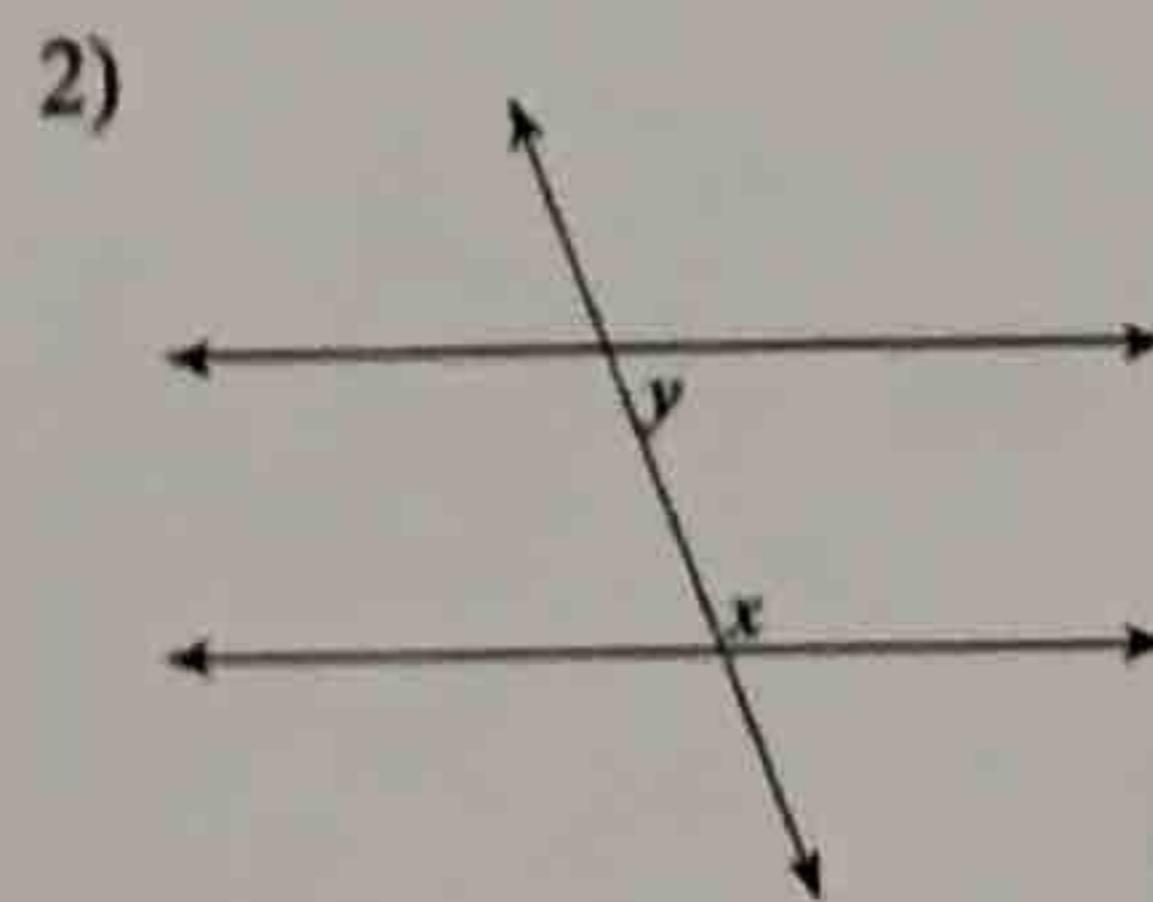
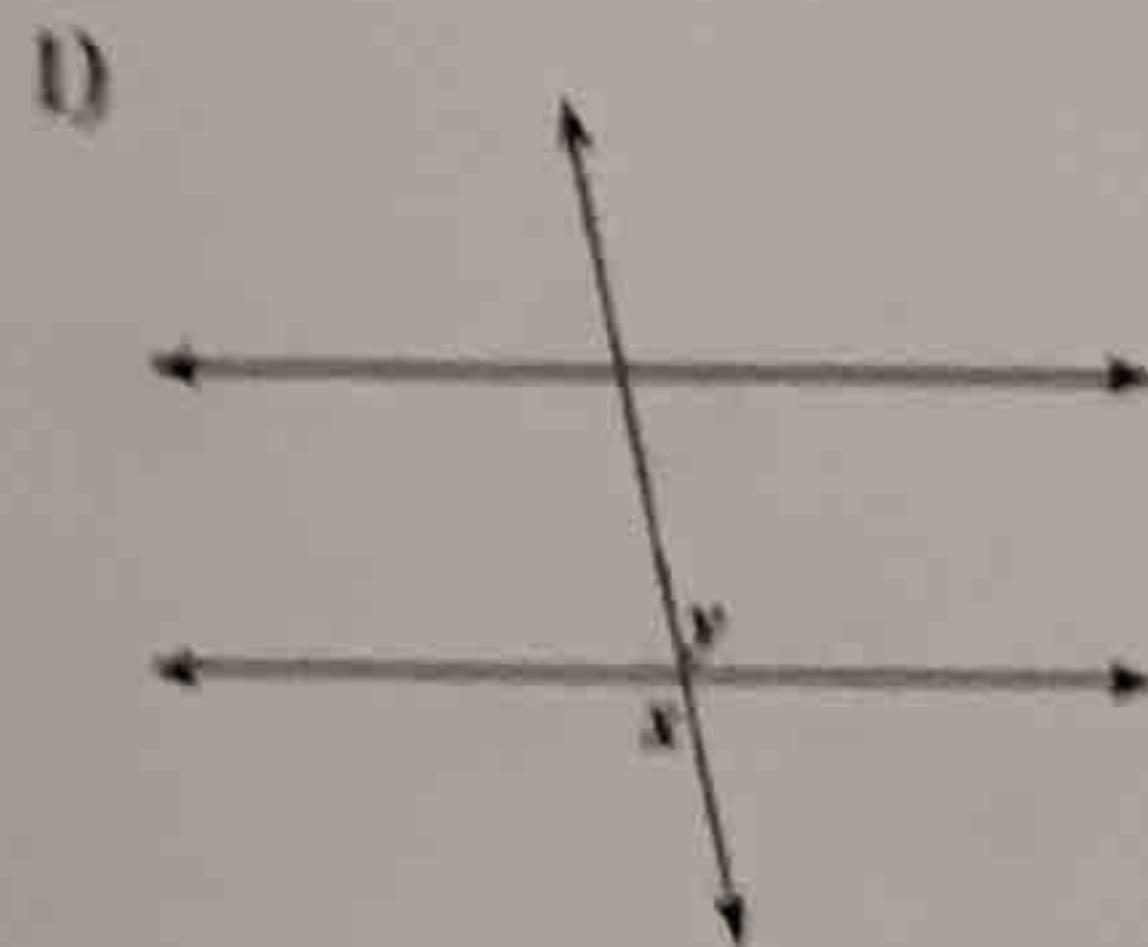


Name: _____

Parallels Cut by a Transversal HW Day 2

Identify each pair of angles as corresponding, alternate interior, alternate exterior, consecutive interior, vertical, or adjacent.



Directions: Find the value of the variable, show your geometric set up, and justify your set up!

You must use only the following relationships:

Corresponding angles are congruent

Alternate interior angles are congruent

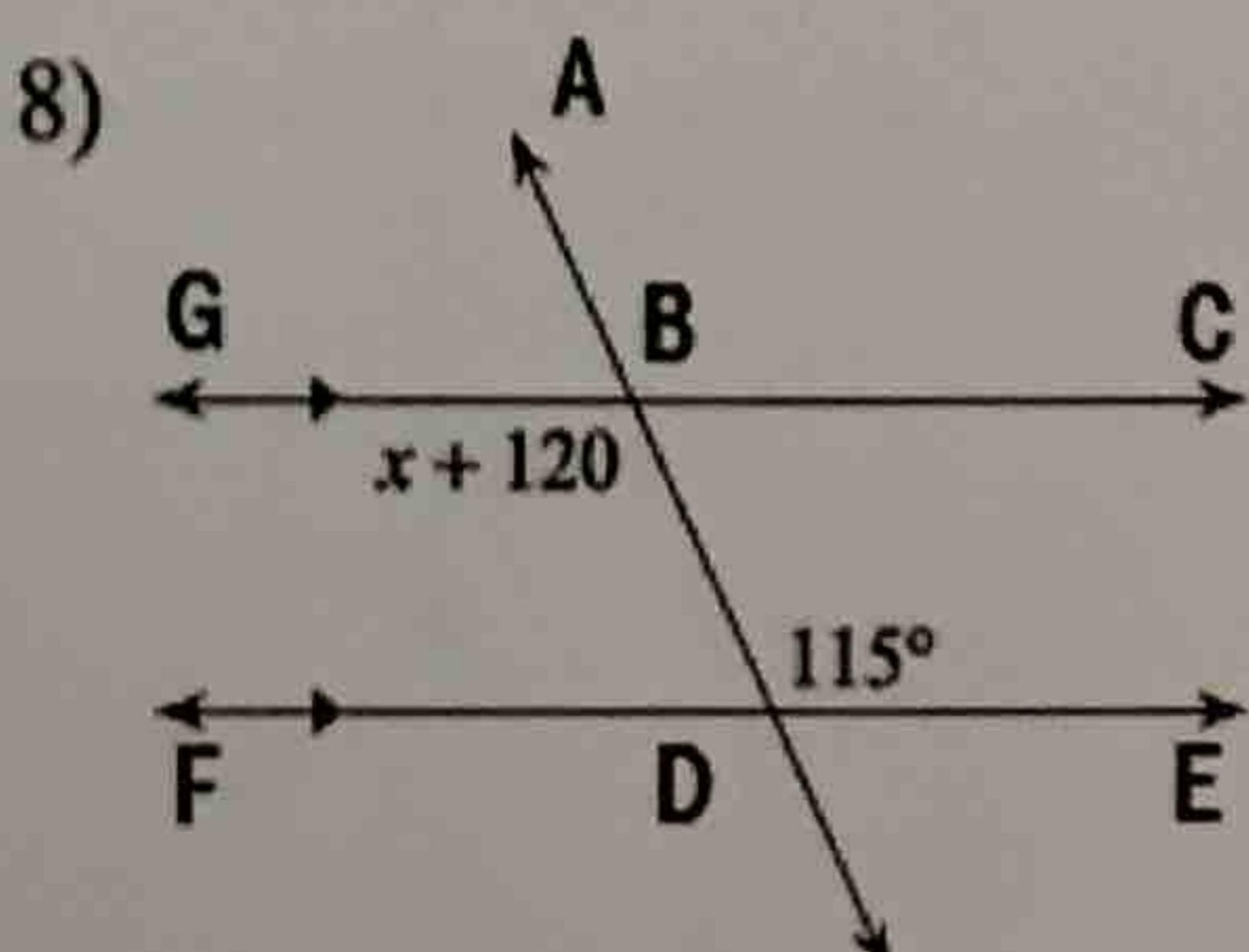
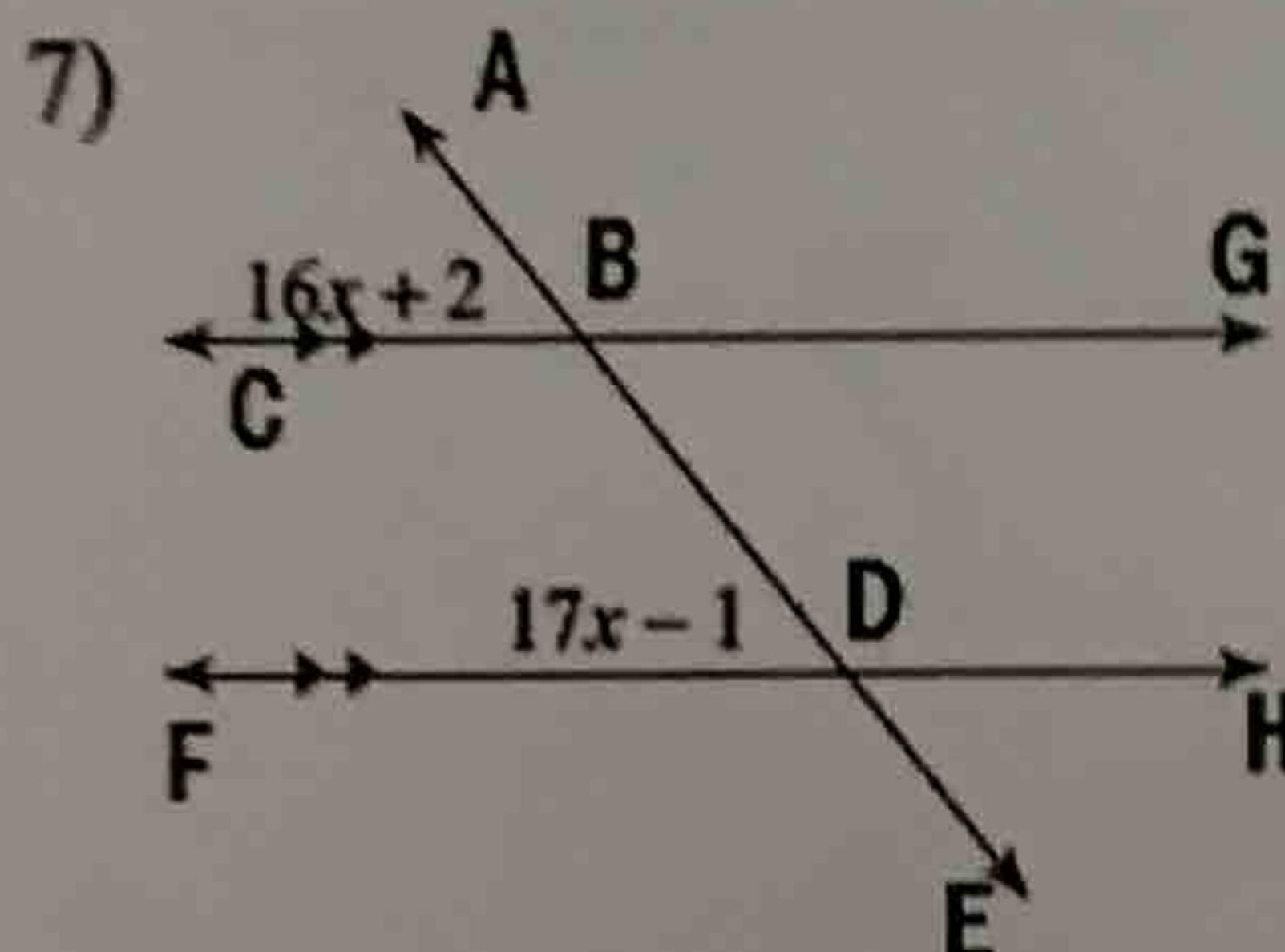
Alternate exterior angles are congruent

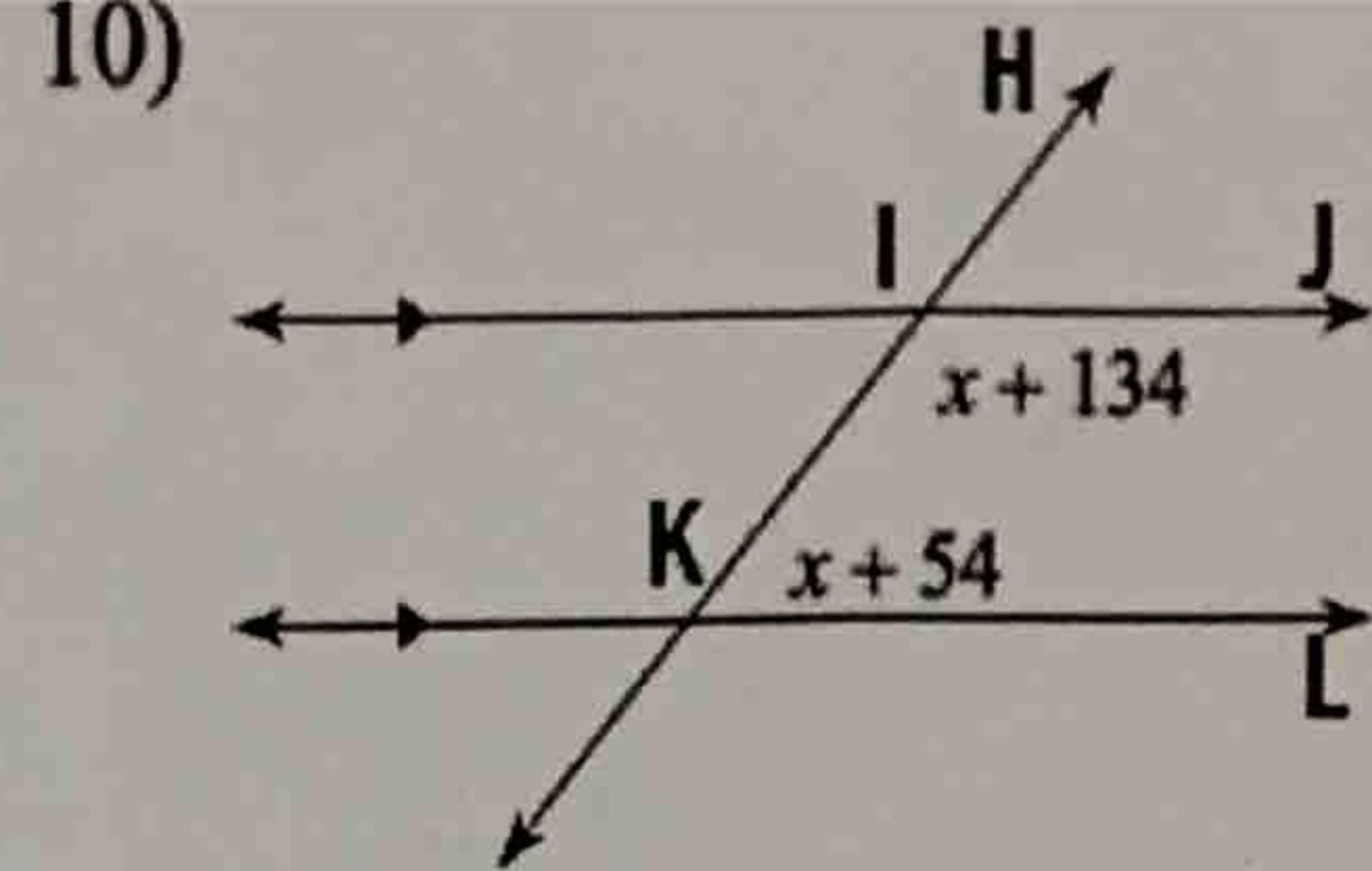
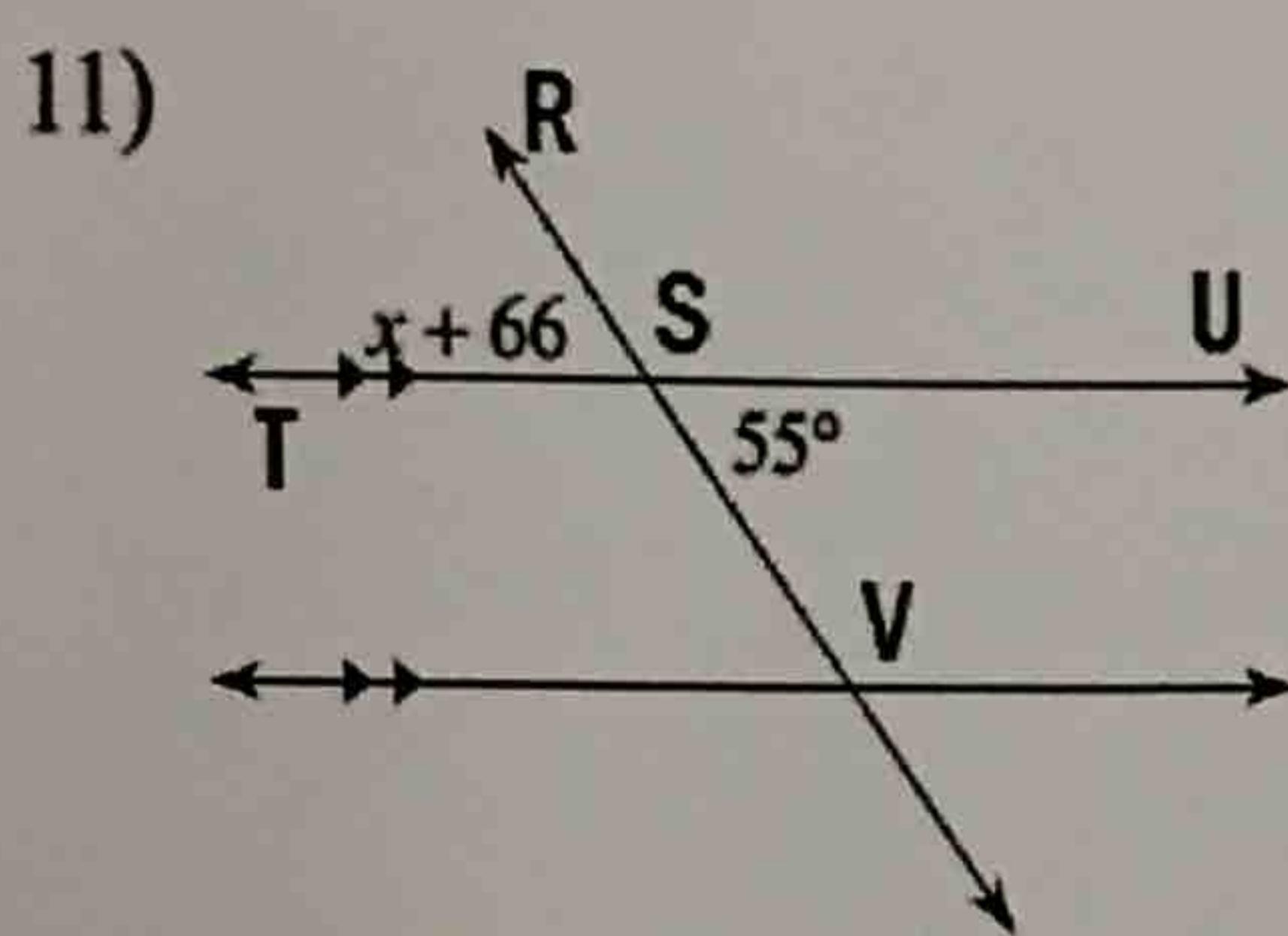
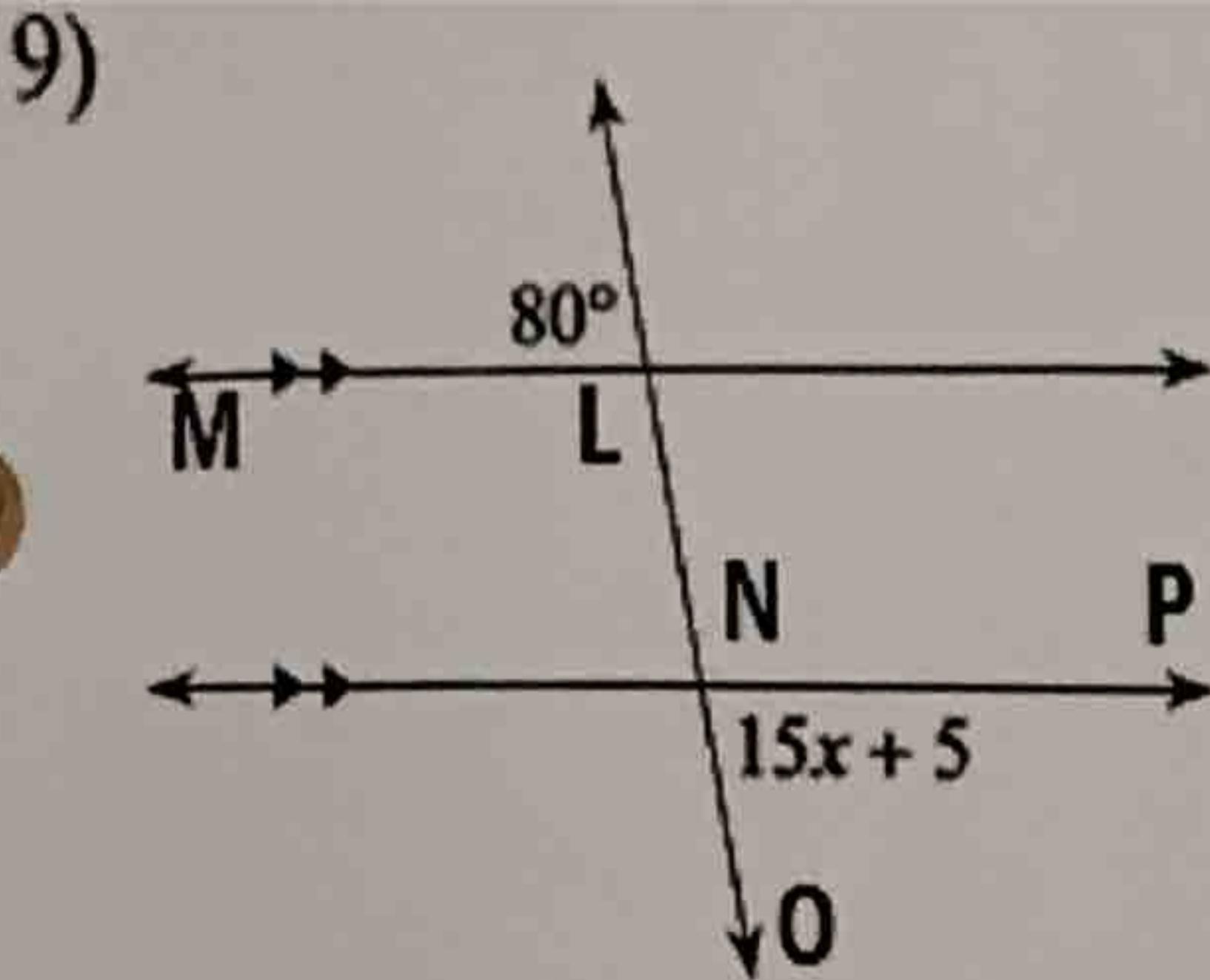
Consecutive interior angles are supplementary

Linear pairs are supplementary

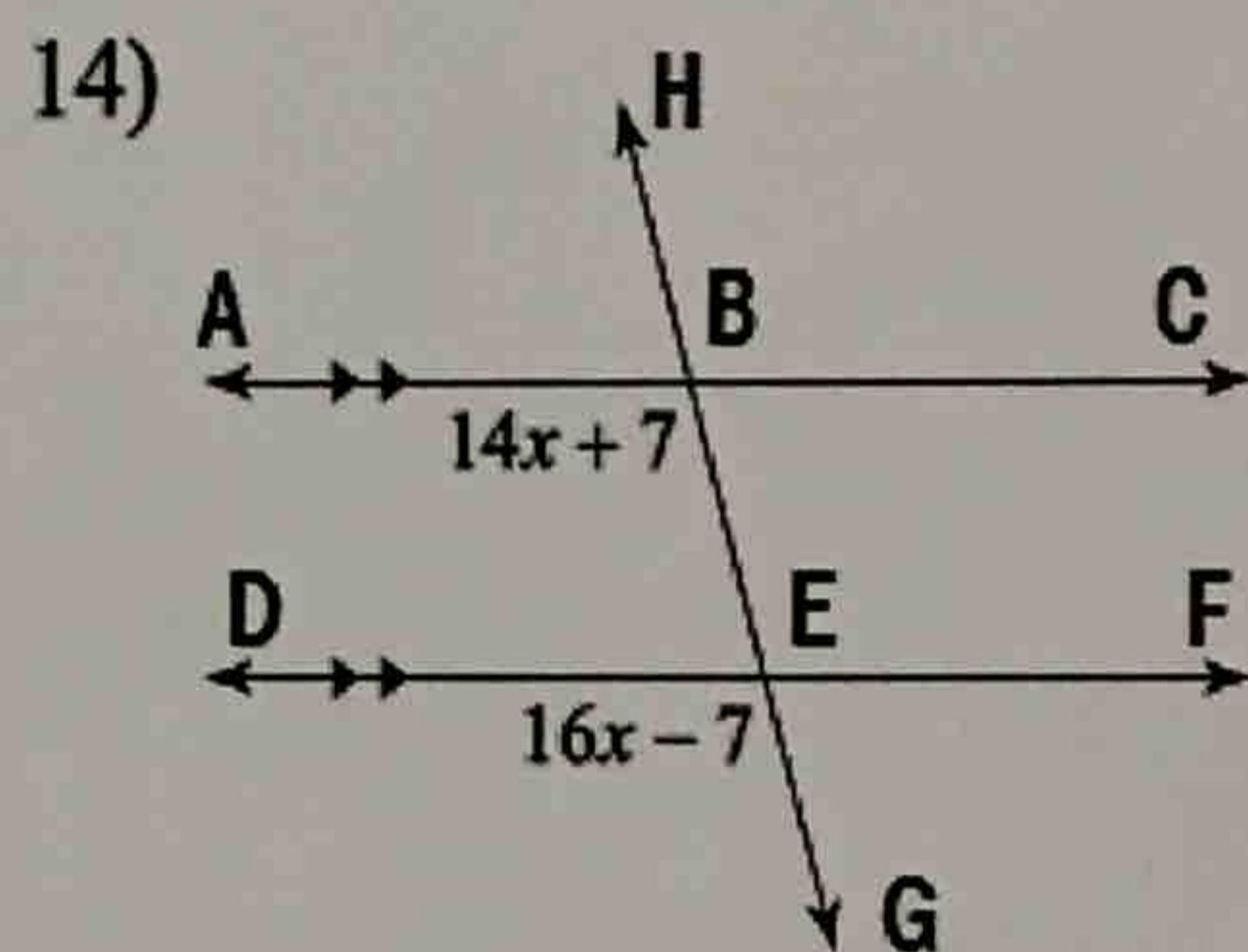
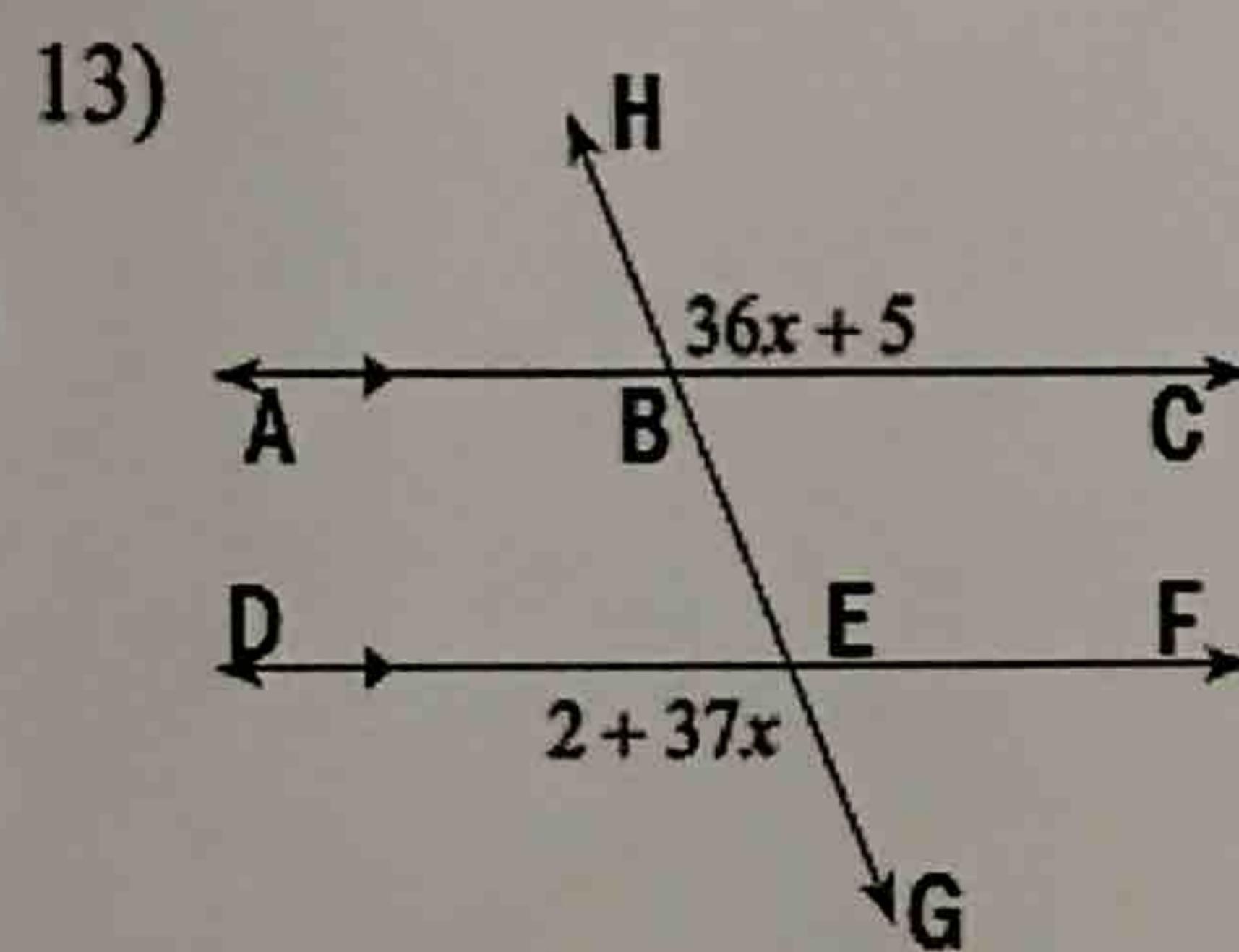
Vertical angles are congruent

Solve for x.

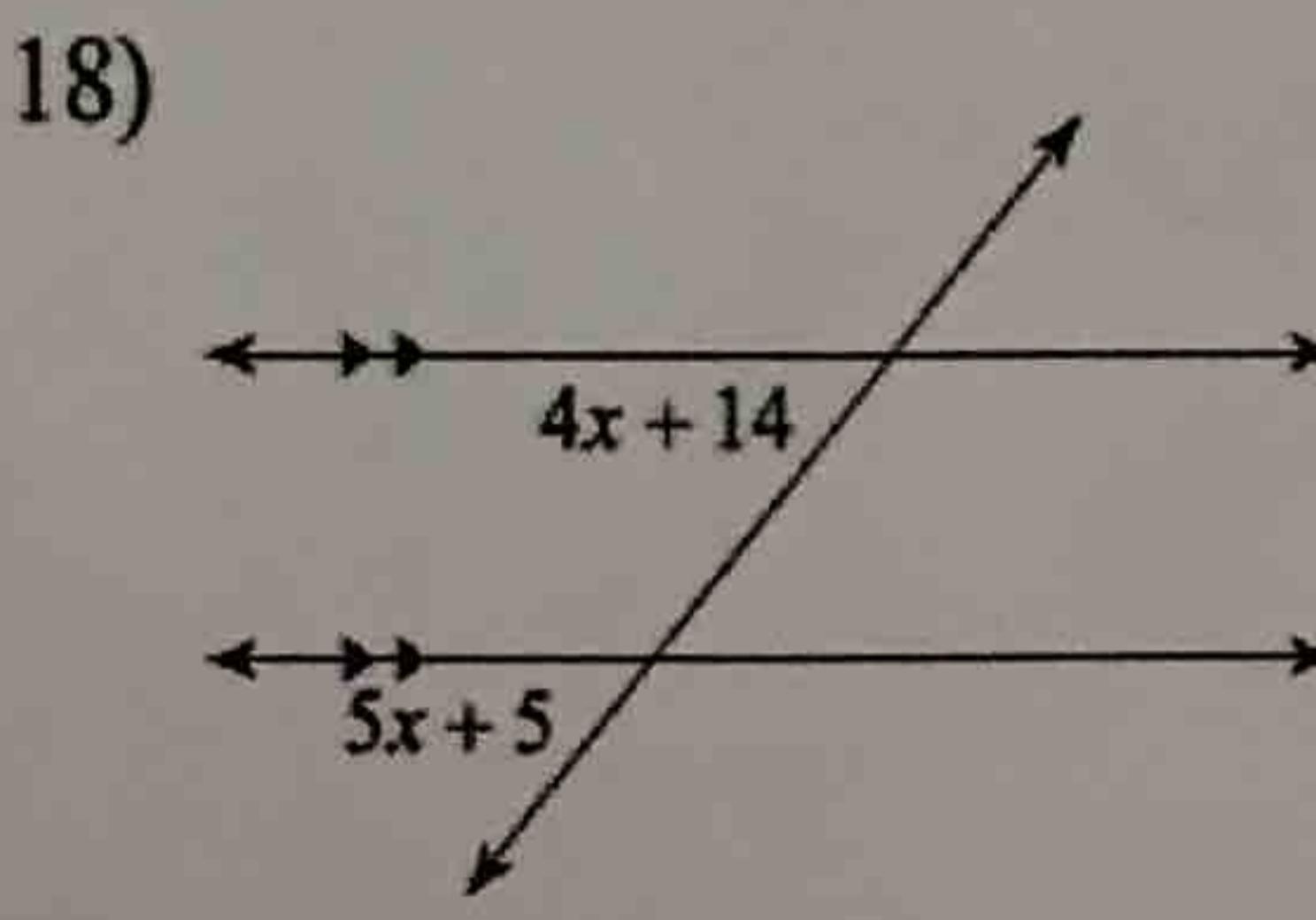
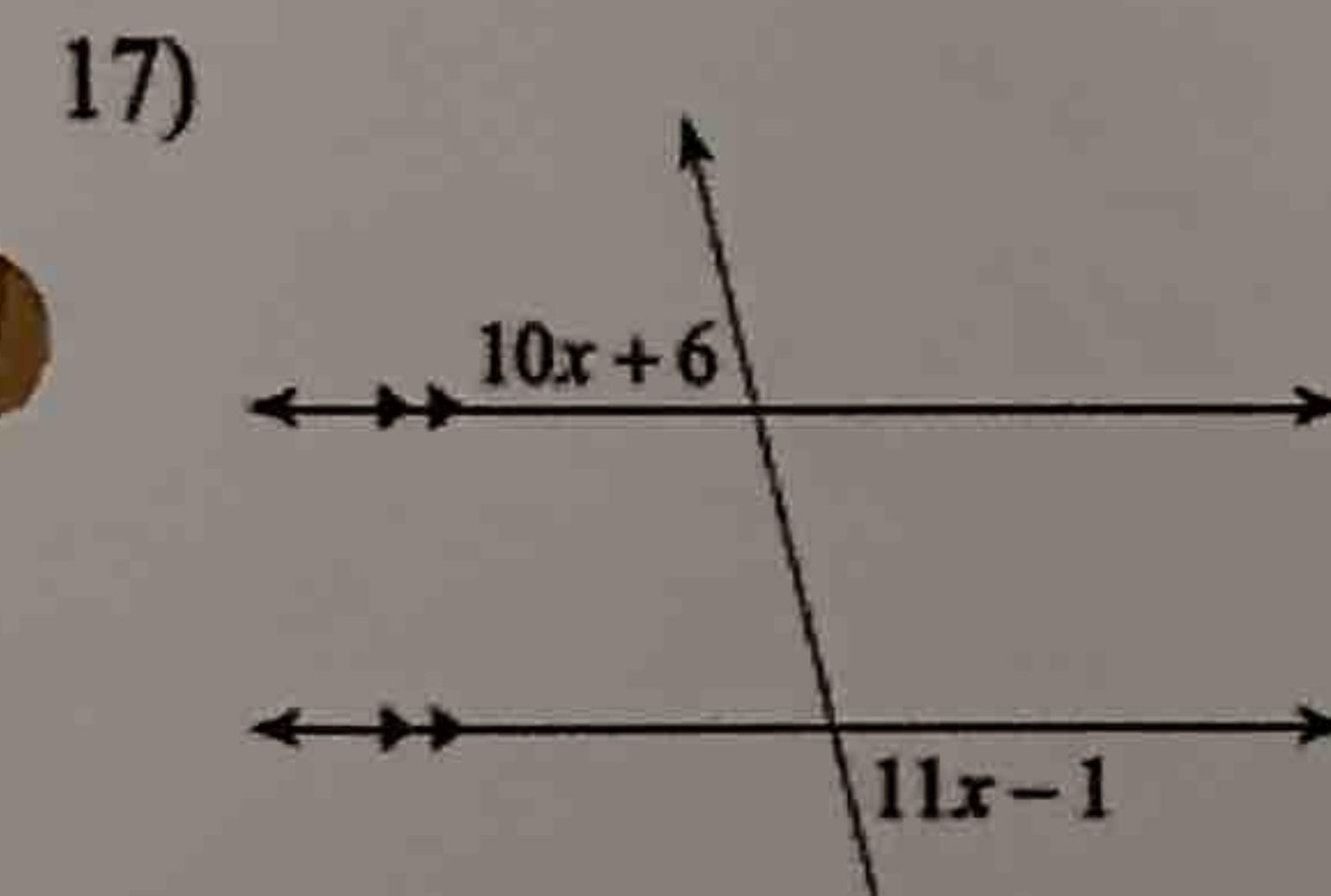
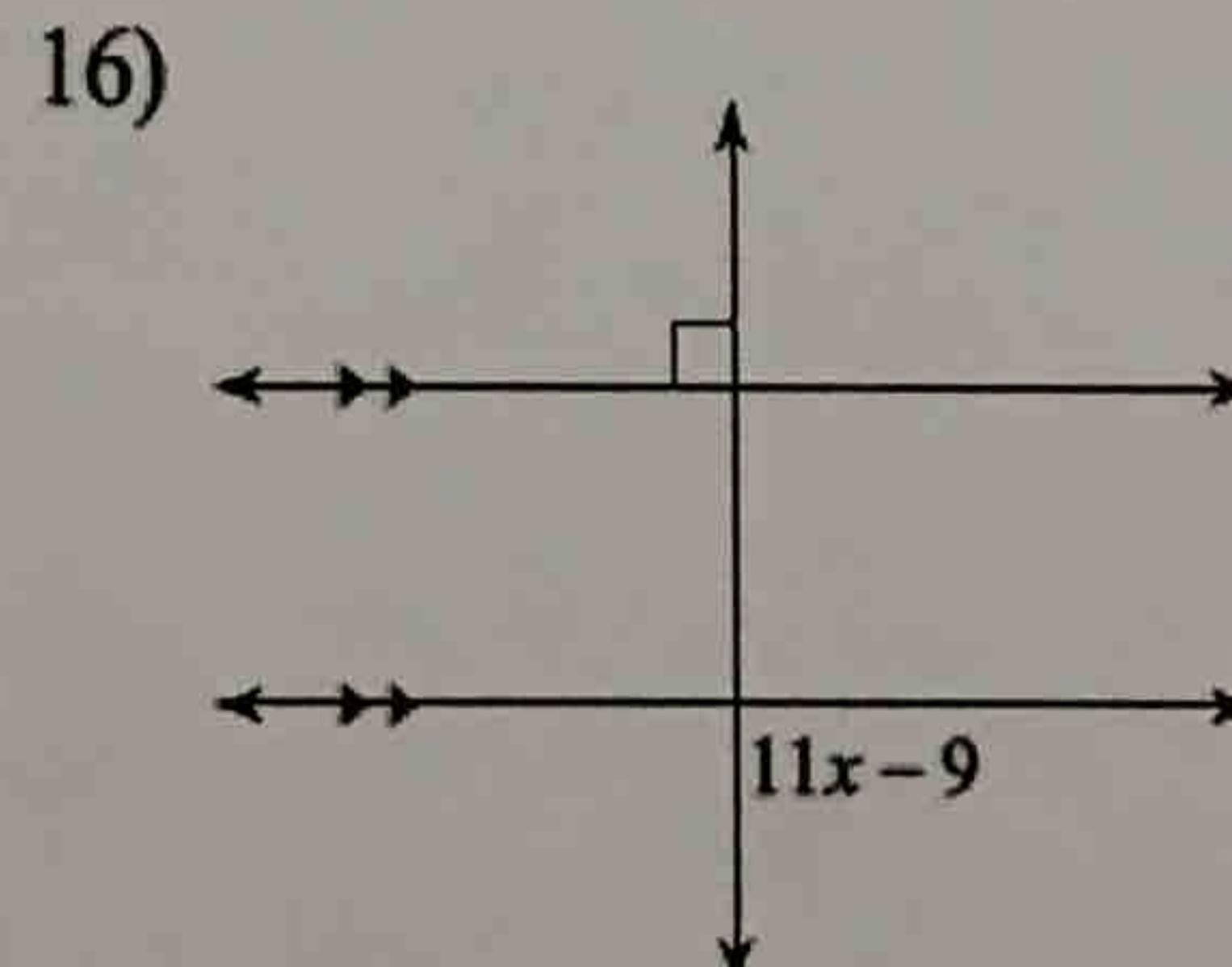
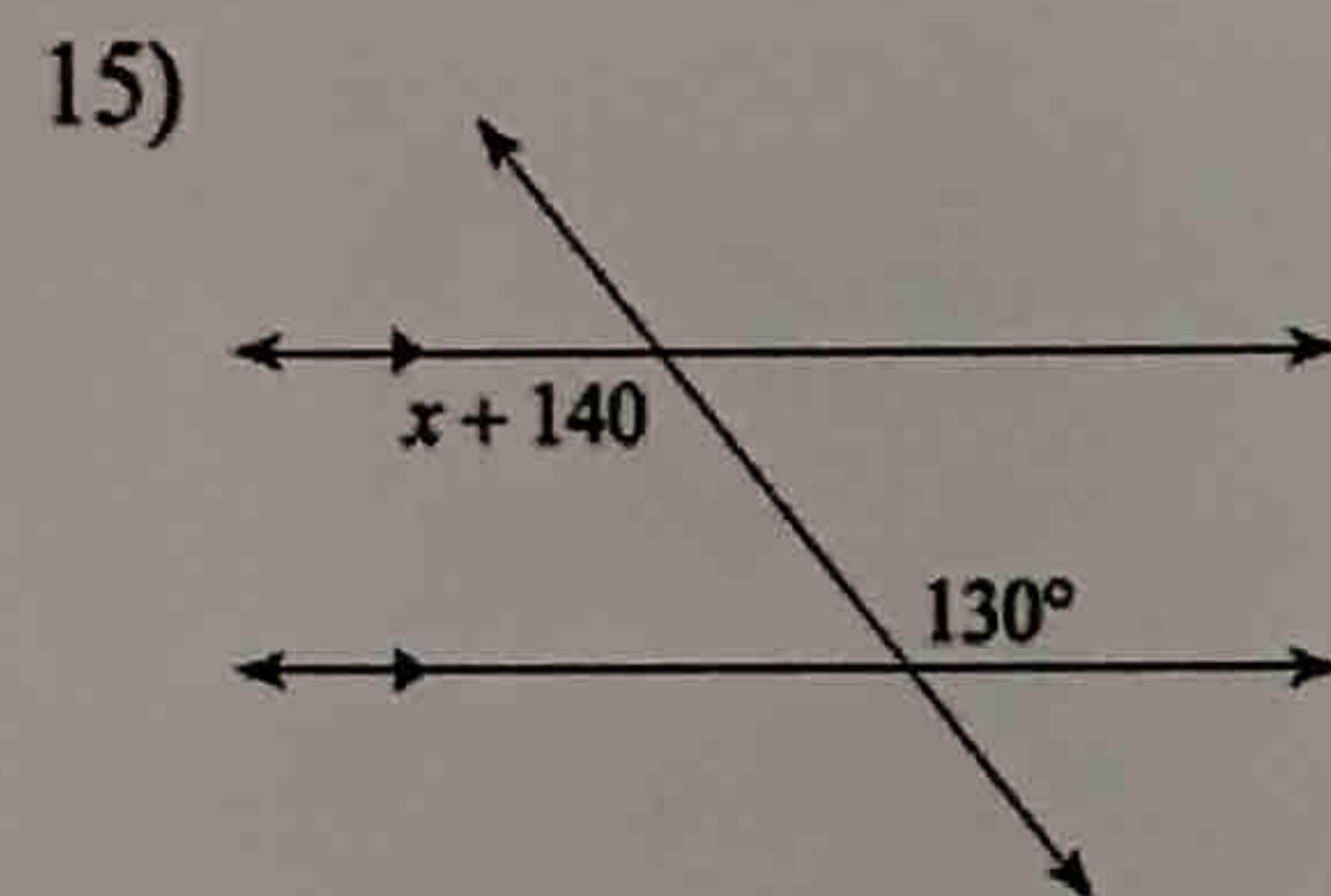




Solve for x .



Just solve for x and justify. No geometry.

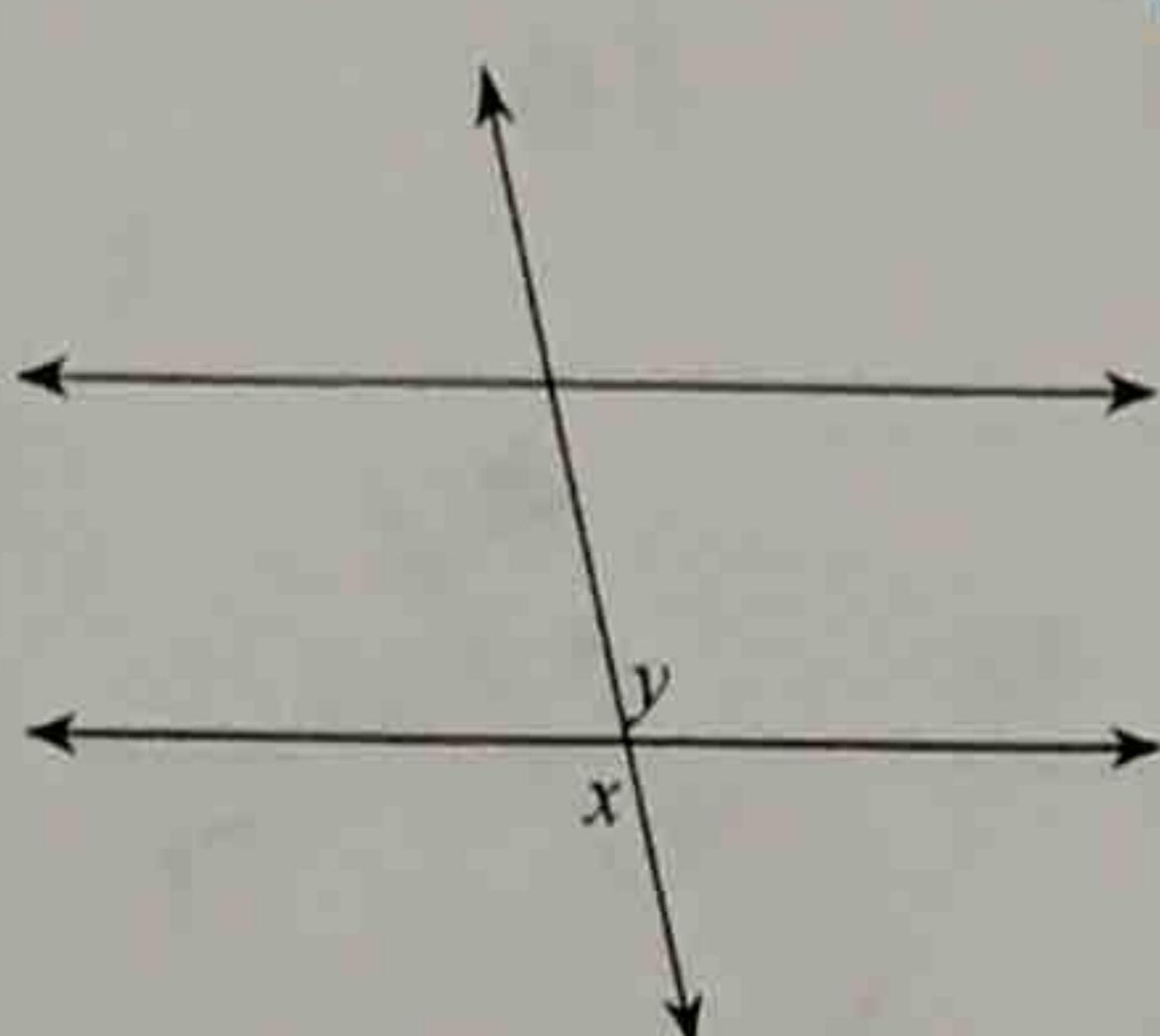


Parallels Cut by a Transversal: Day 2 HW

Date _____ Hour _____

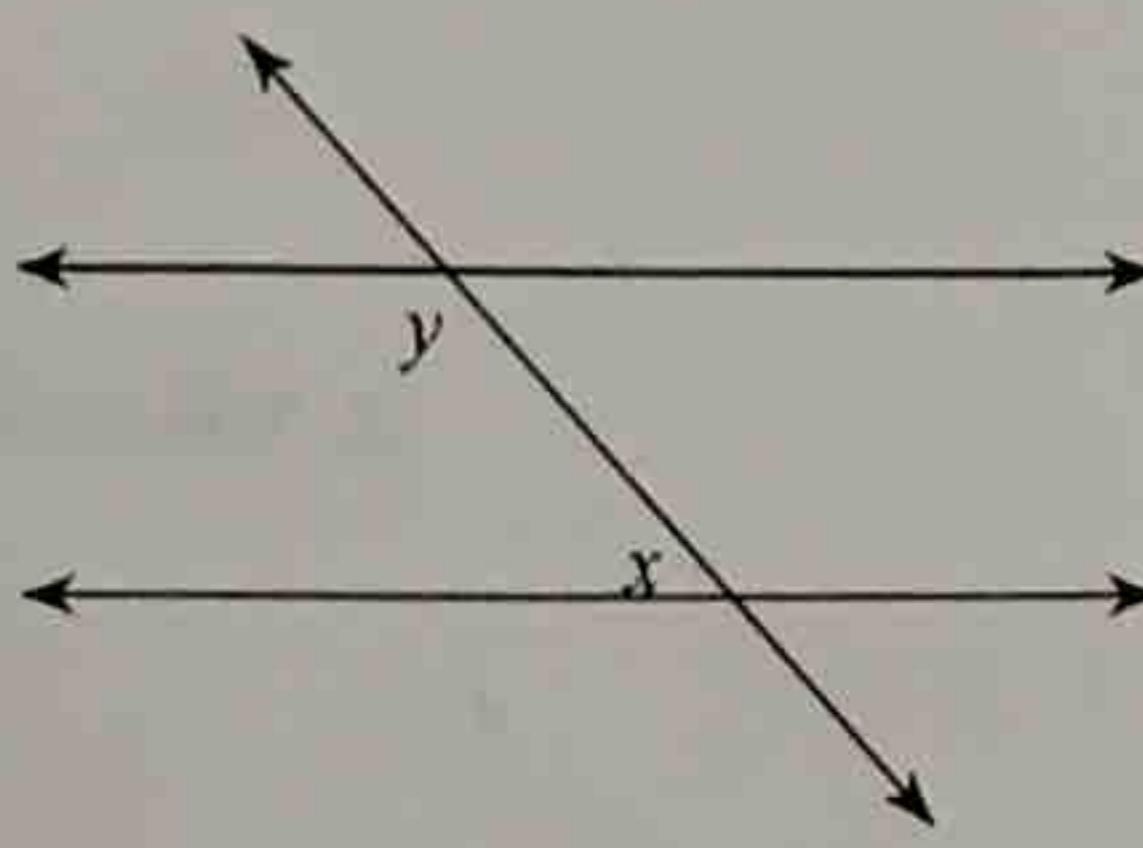
Identify each pair of angles as corresponding, alternate interior, alternate exterior, consecutive interior, vertical, or adjacent.

1)



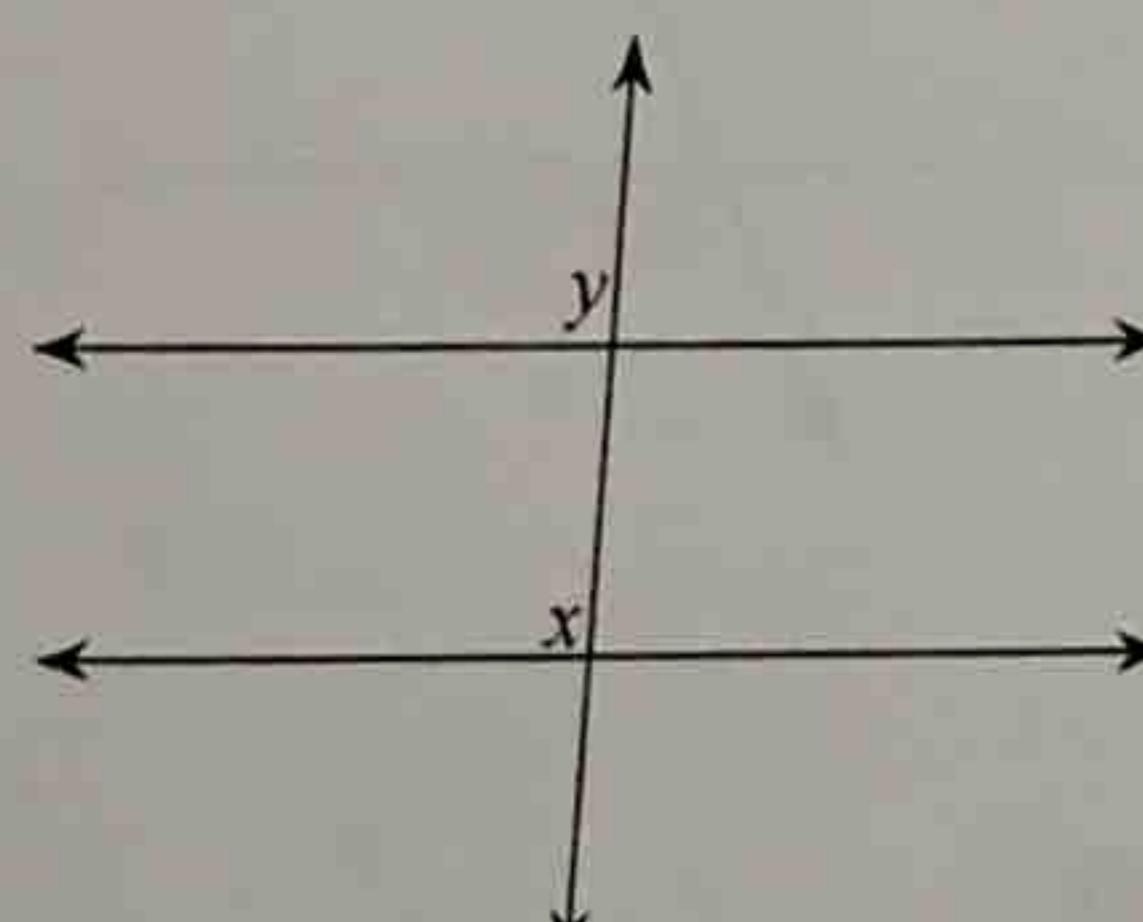
vertical

3)



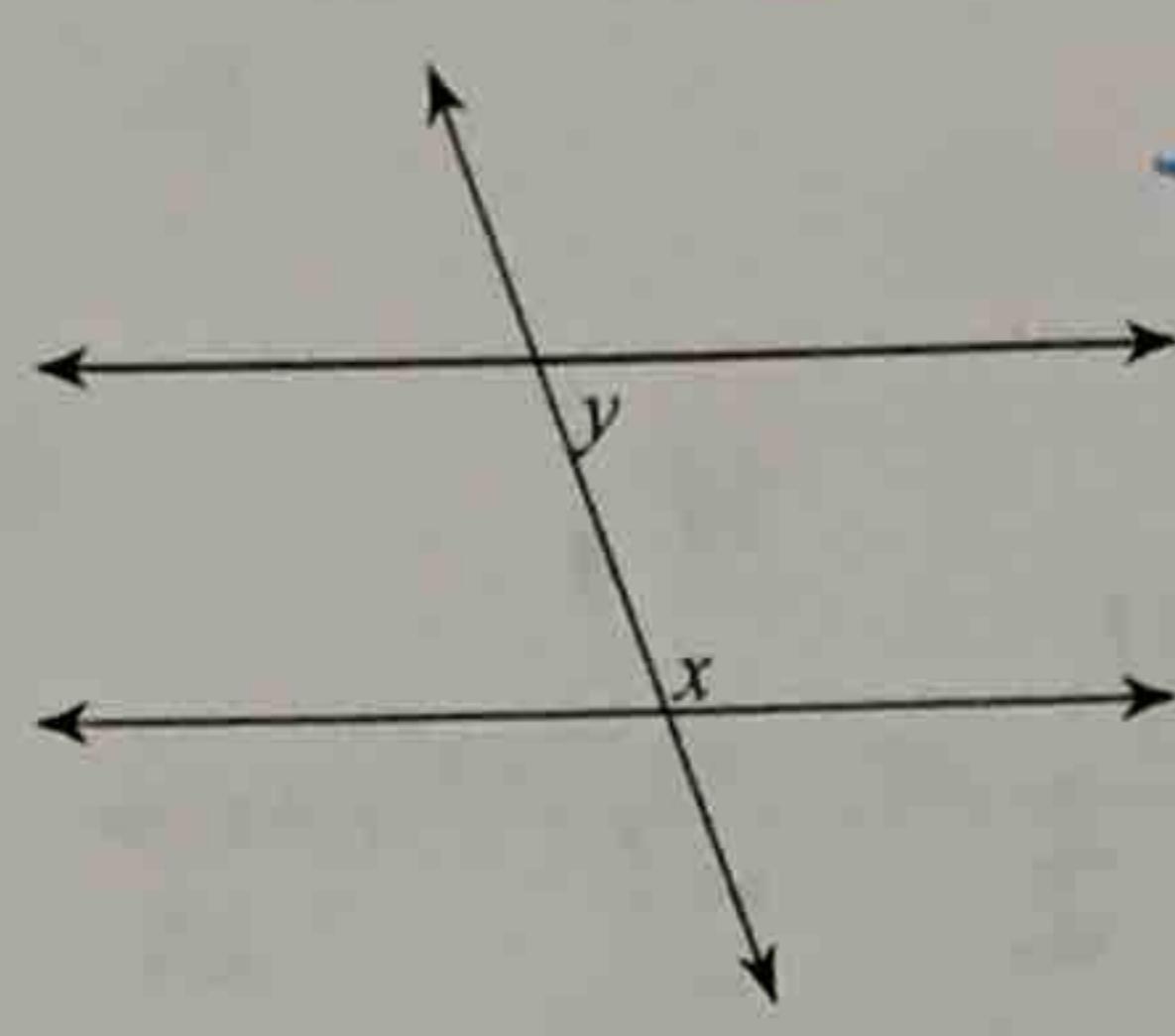
consecutive interior

5)



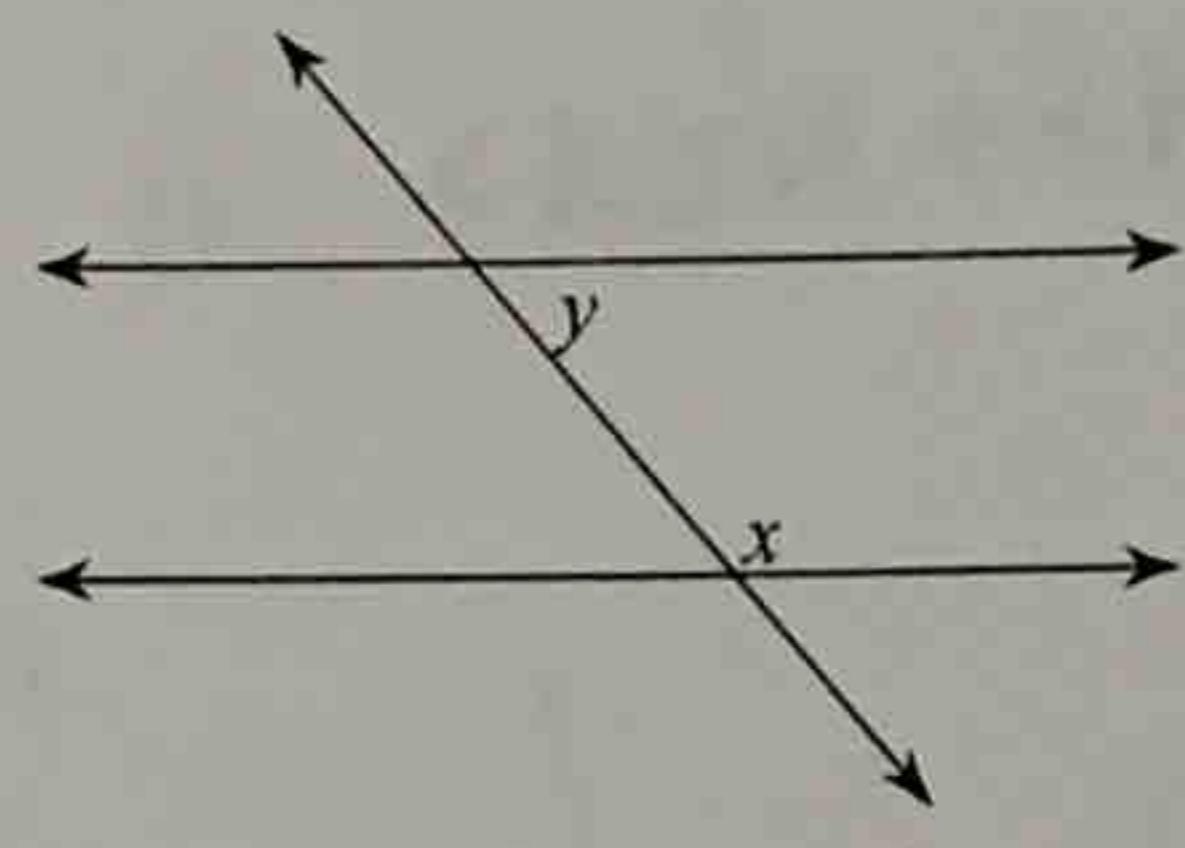
corresponding

2)



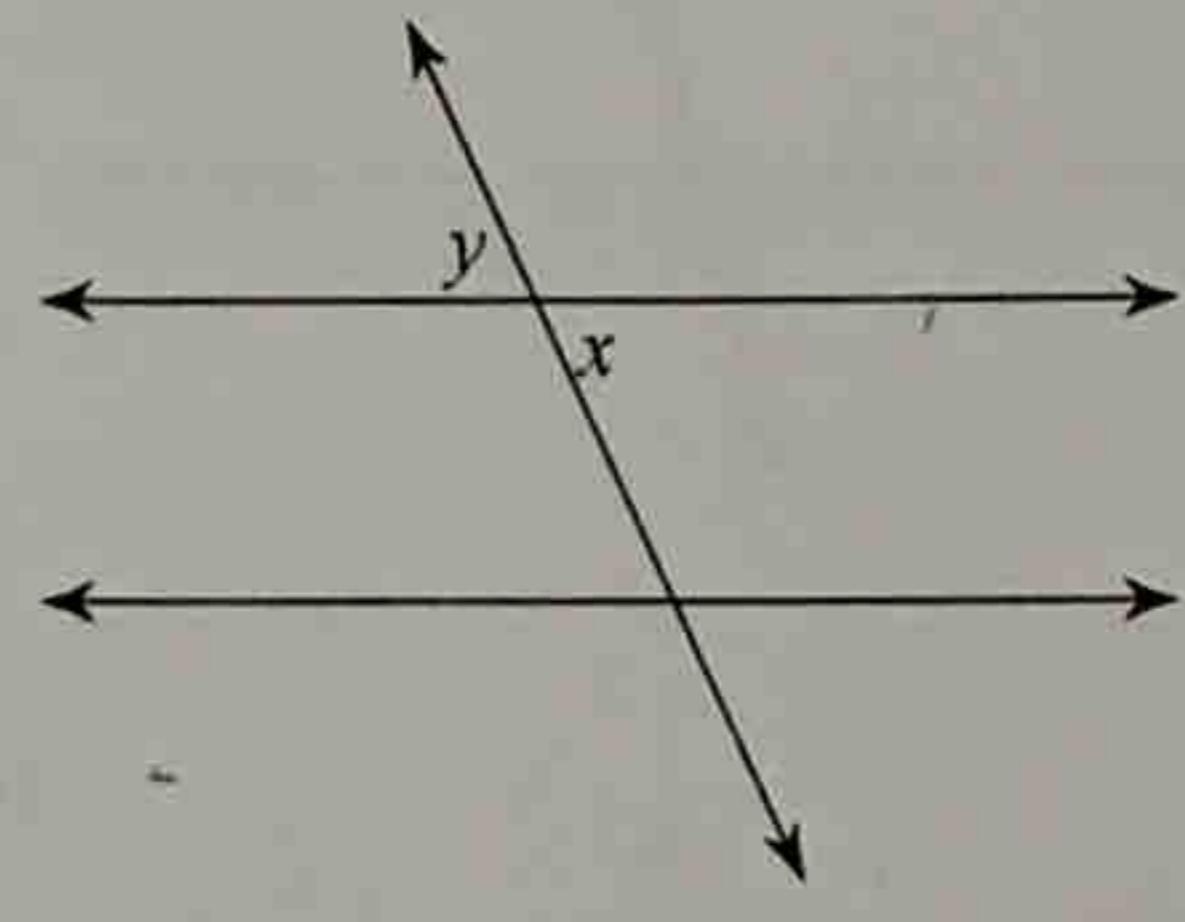
consecutive interior

4)



consecutive interior

6)



vertical

Directions: Find the value of the variable and justify your set up

You must use only the following relationships:

Corresponding angles are congruent

Alternate interior angles are congruent

Alternate exterior angles are congruent

Consecutive interior angles are supplementary

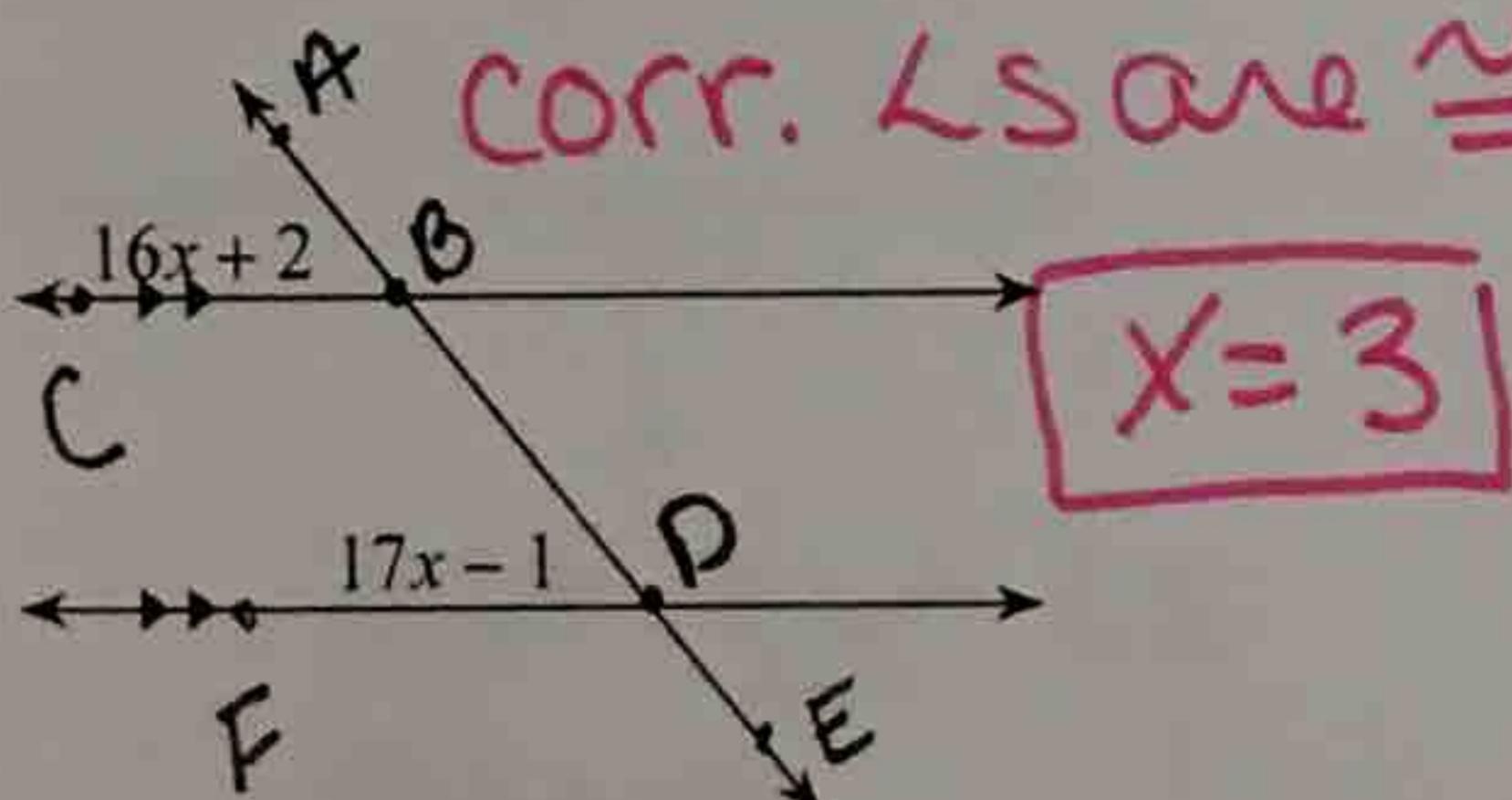
Linear pairs are supplementary

Vertical angles are congruent

Solve for x.

$$\angle ABC \cong \angle FDE$$

7) $\text{corr. } \angle s \text{ are } \cong$

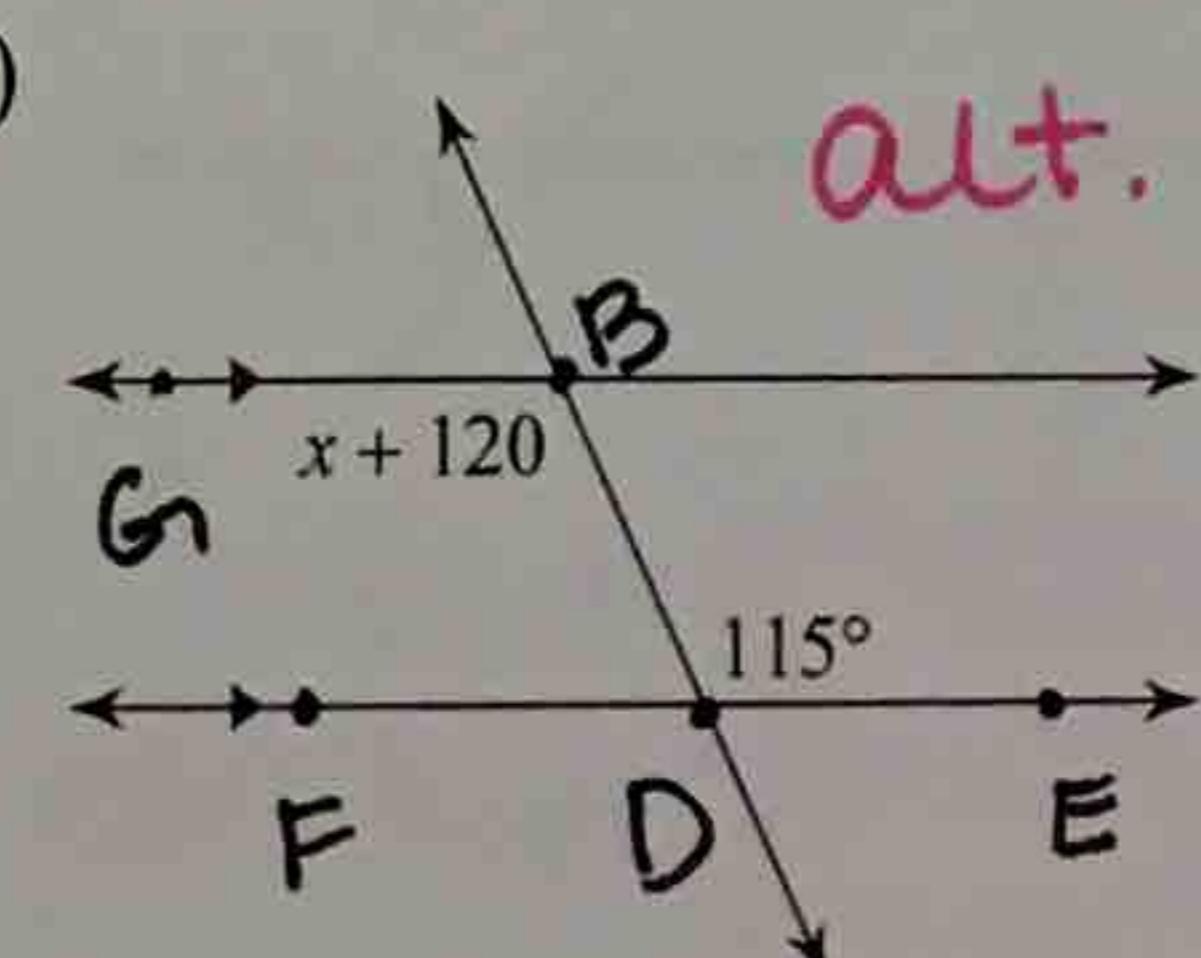


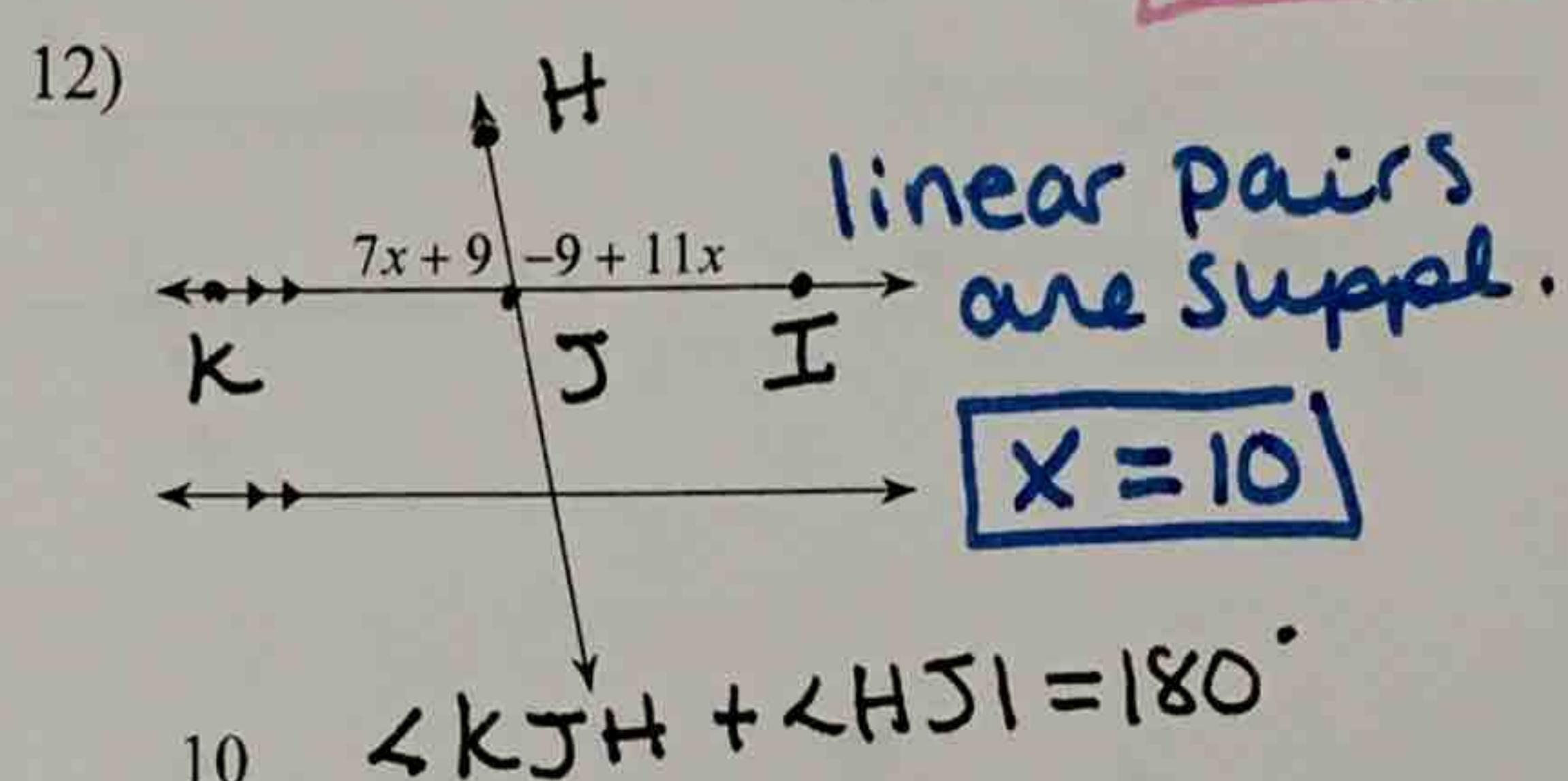
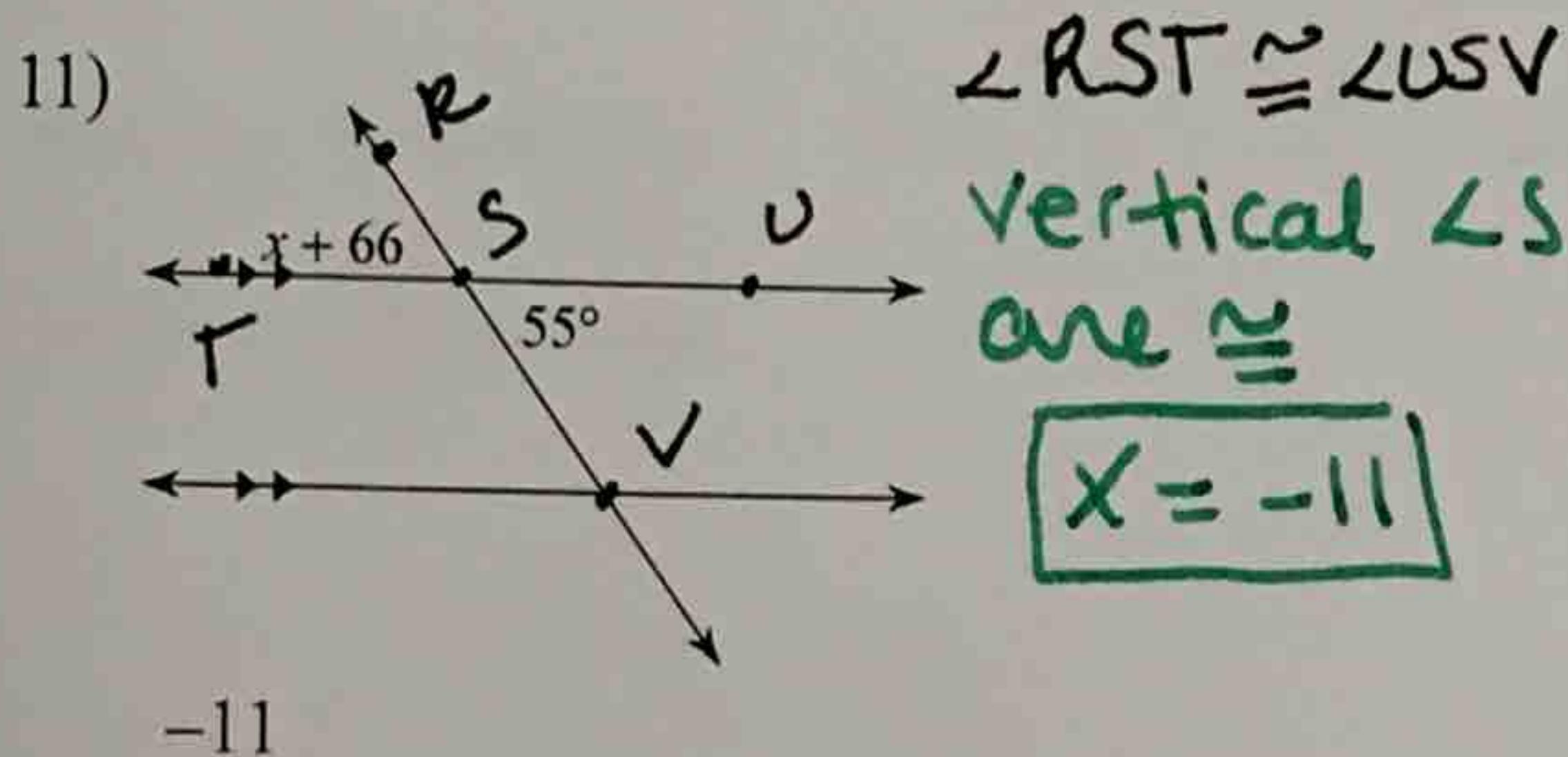
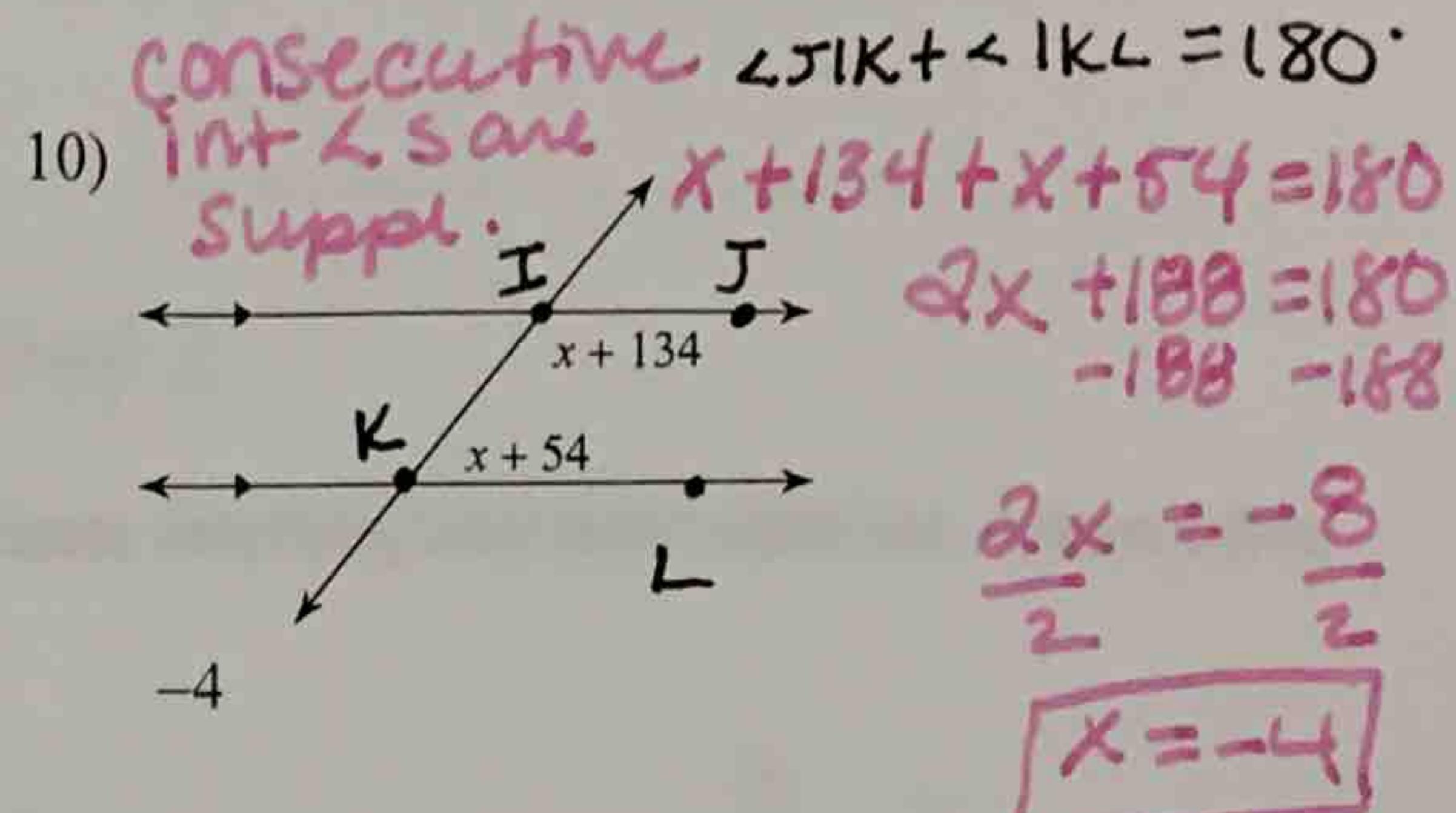
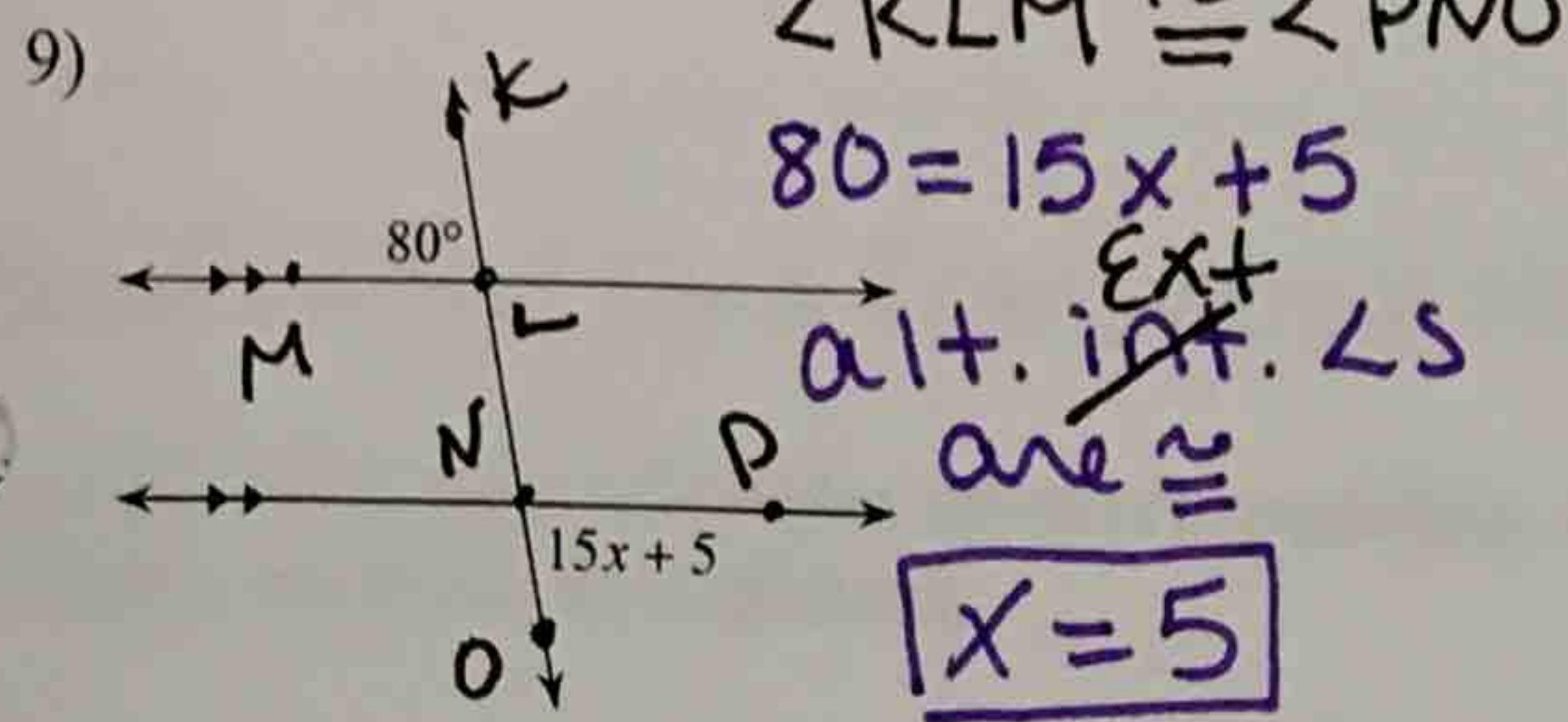
$$x = 3$$

$$\angle GBD \cong \angle BDE$$

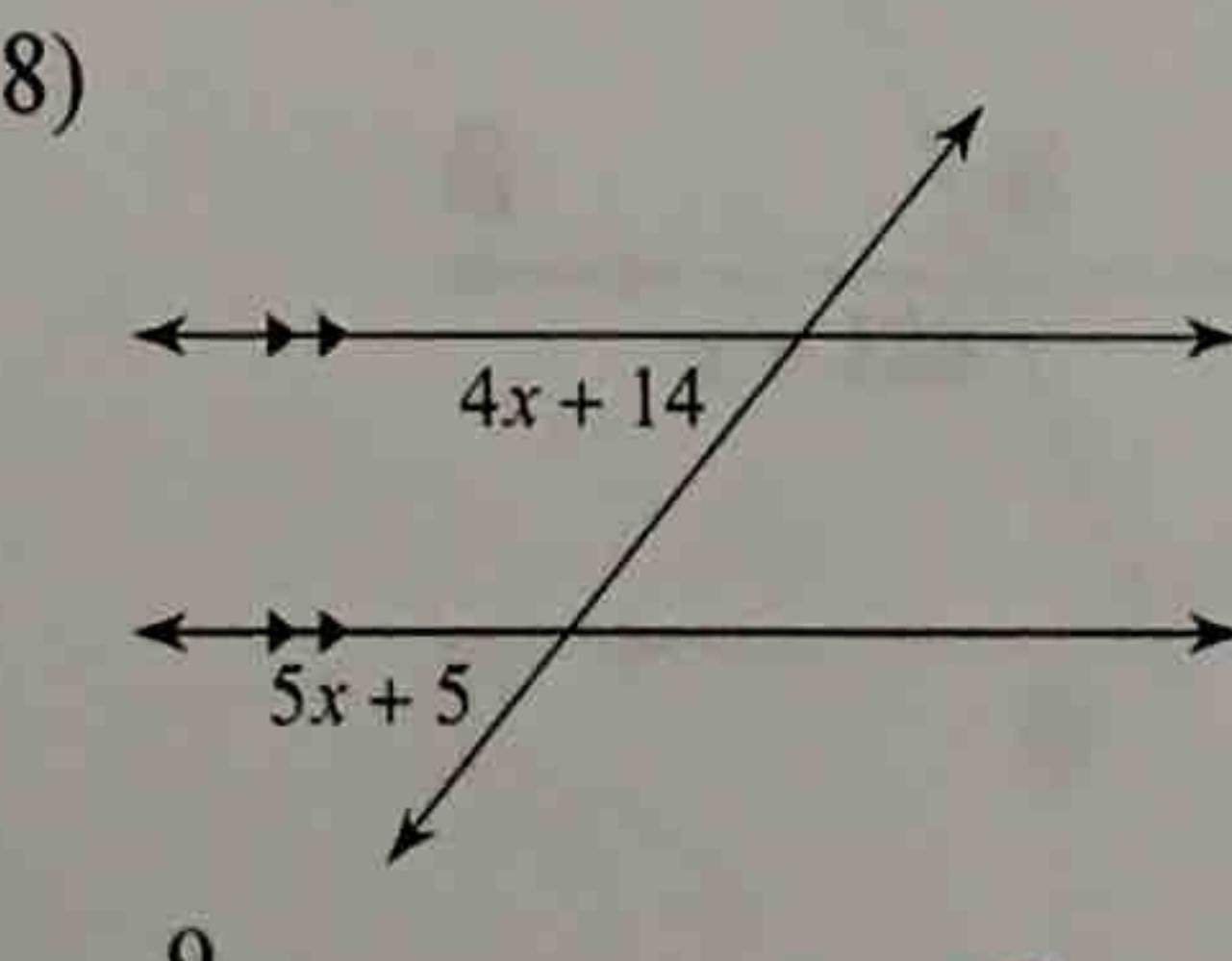
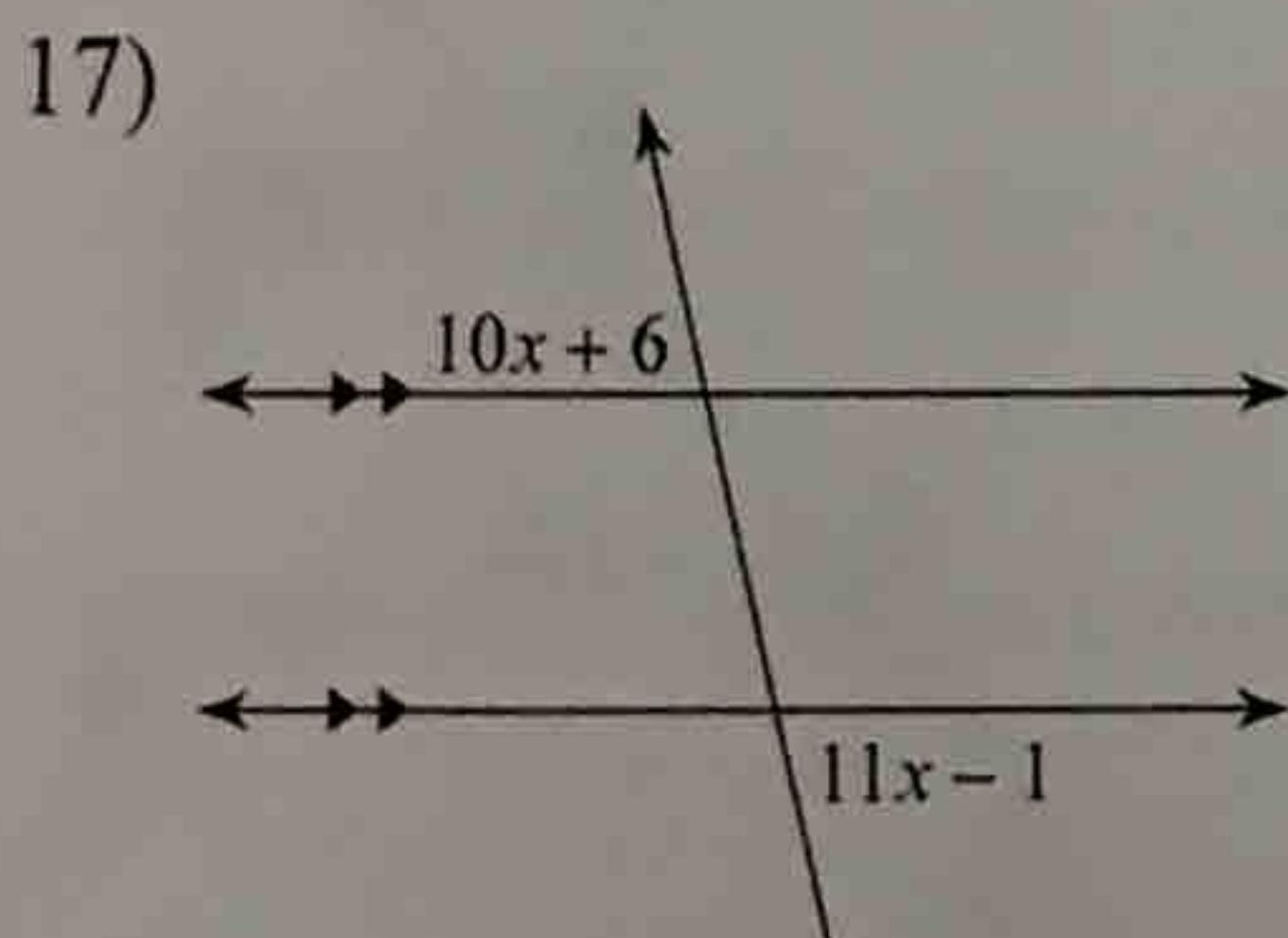
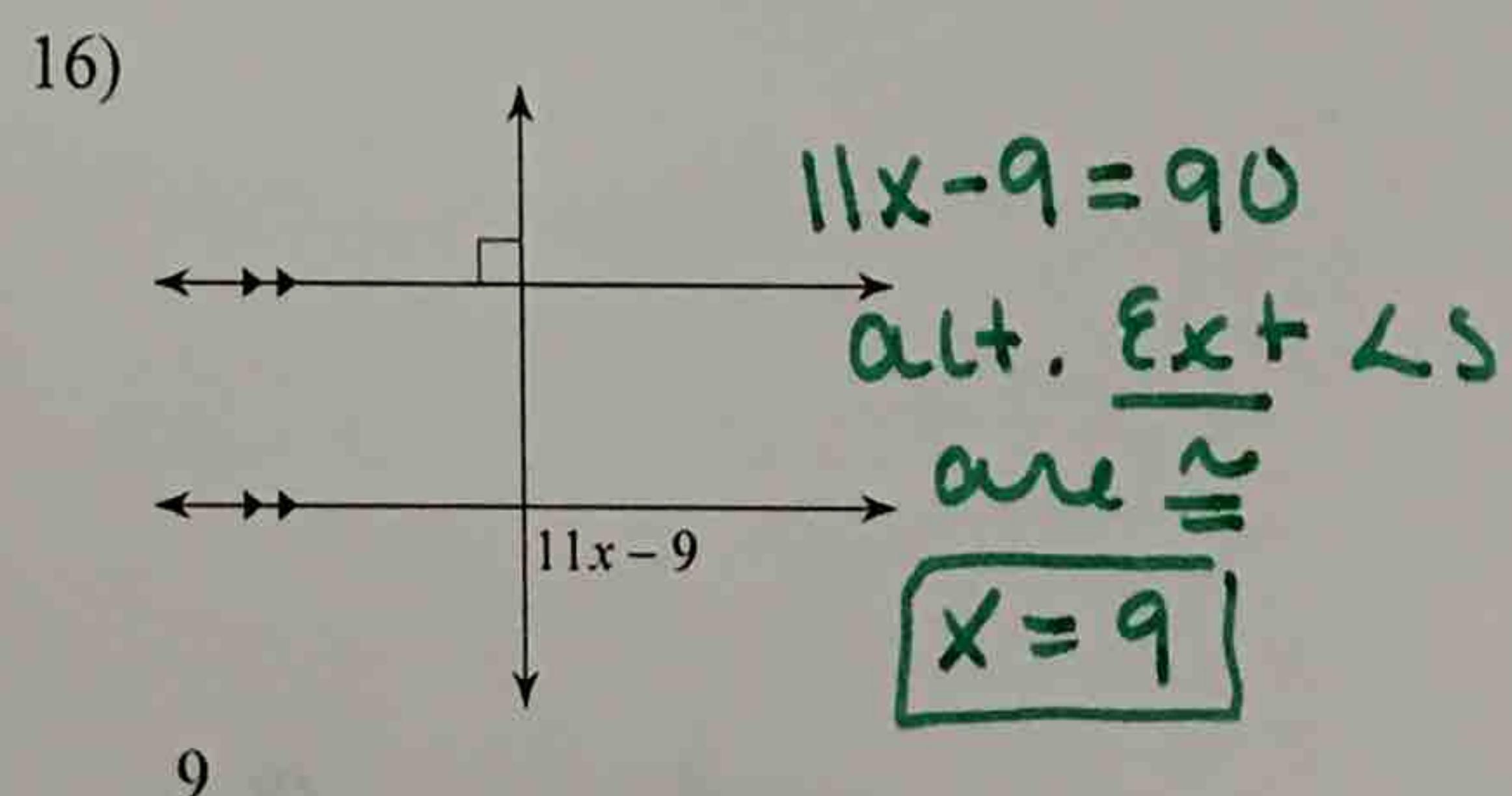
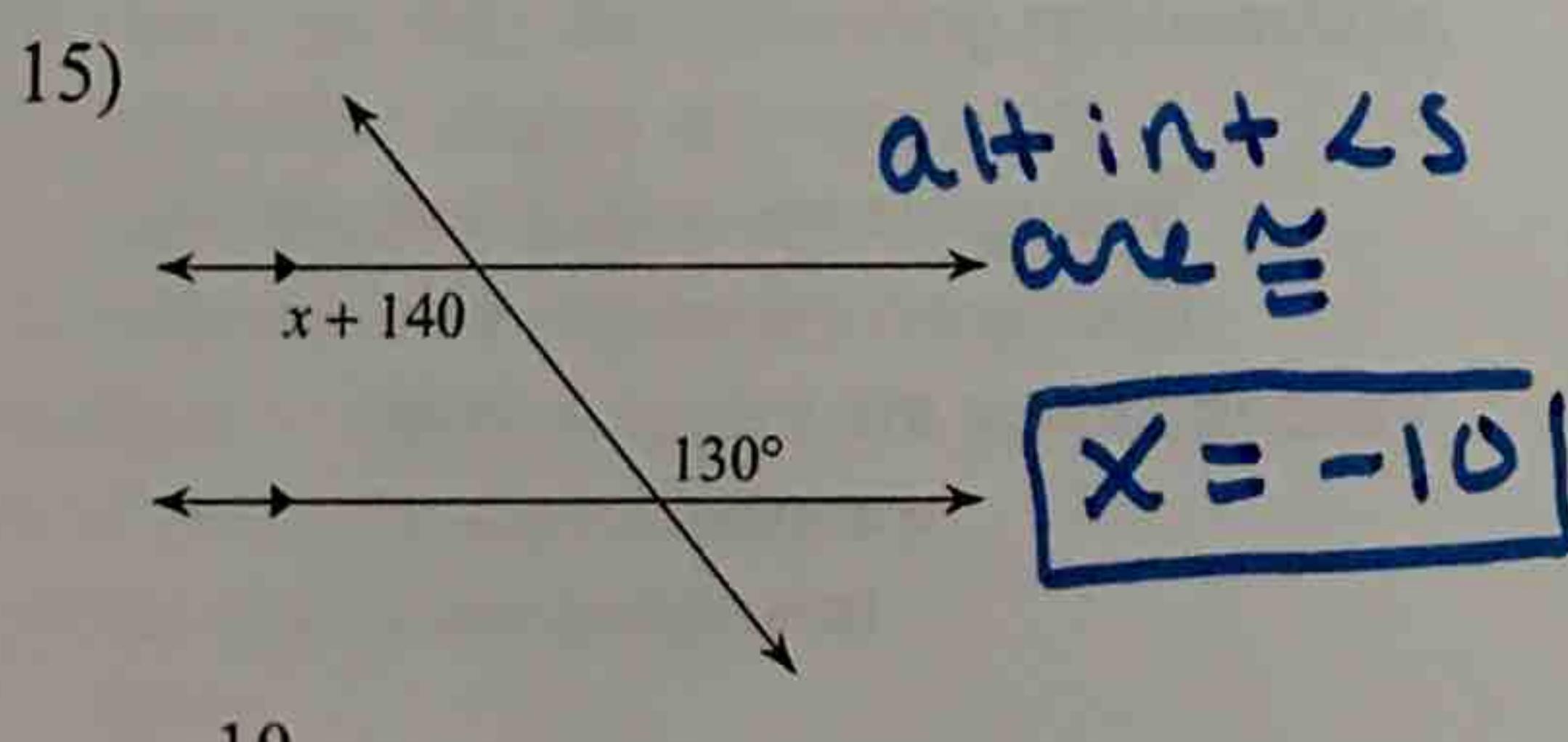
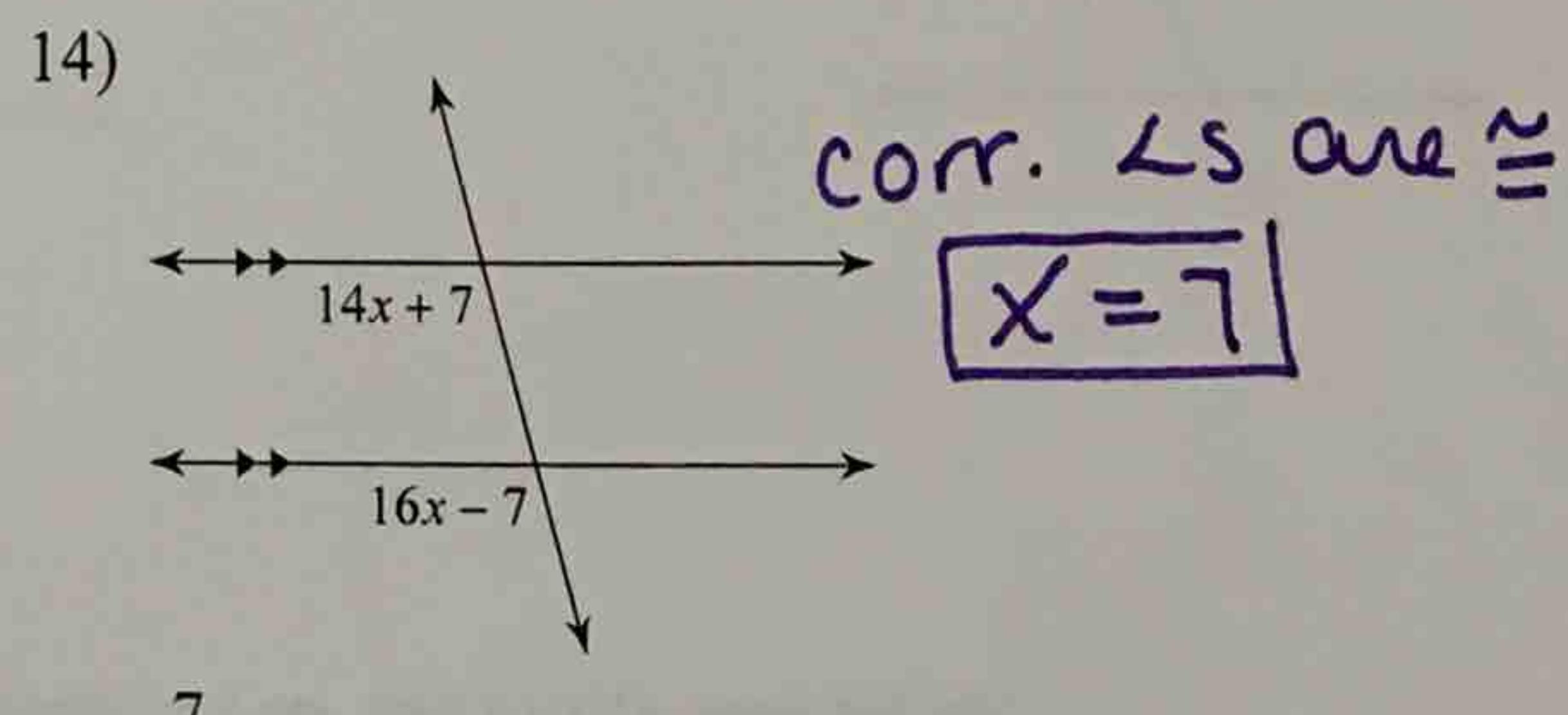
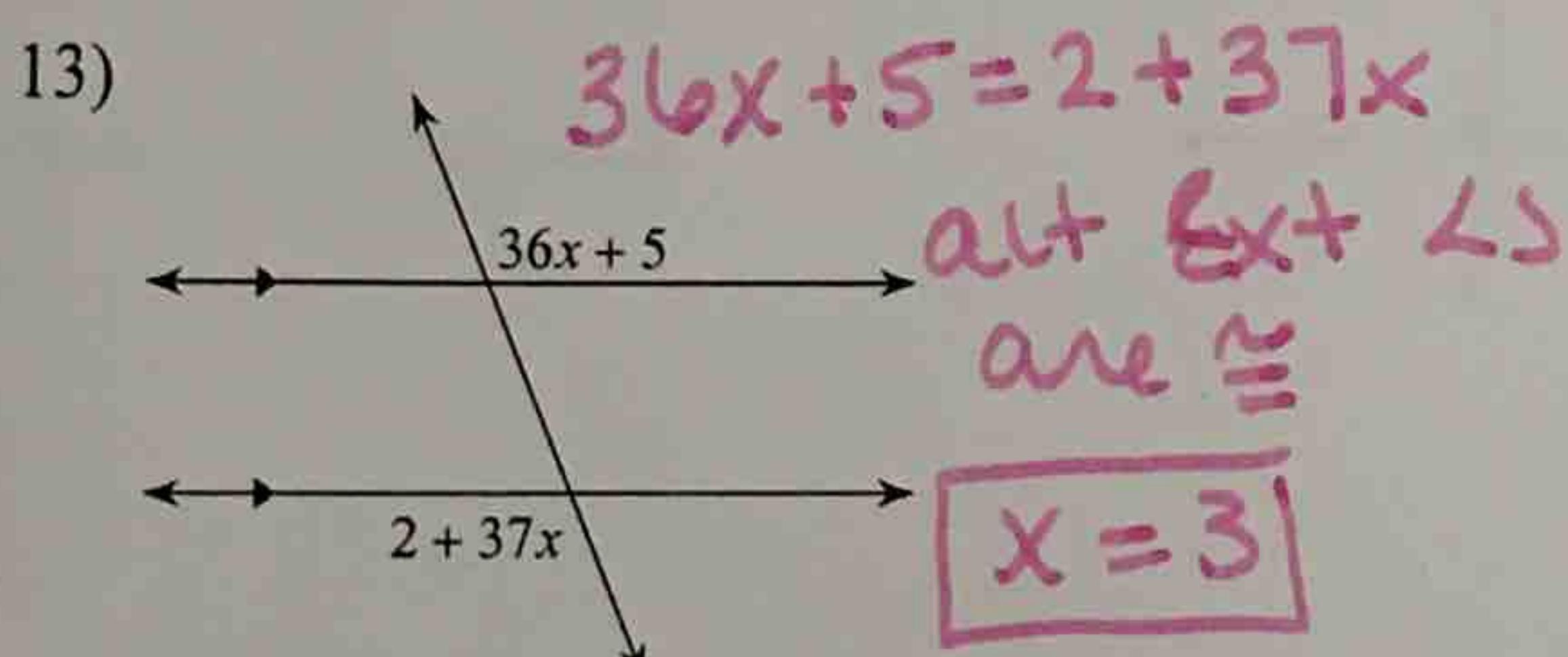
8) $\text{alt. int. } \angle s \text{ are } \cong$

$$x = -5$$





Solve for x.



$4x + 14 = 5x + 5$

corresponding \angle s are \cong

$$X = 9$$