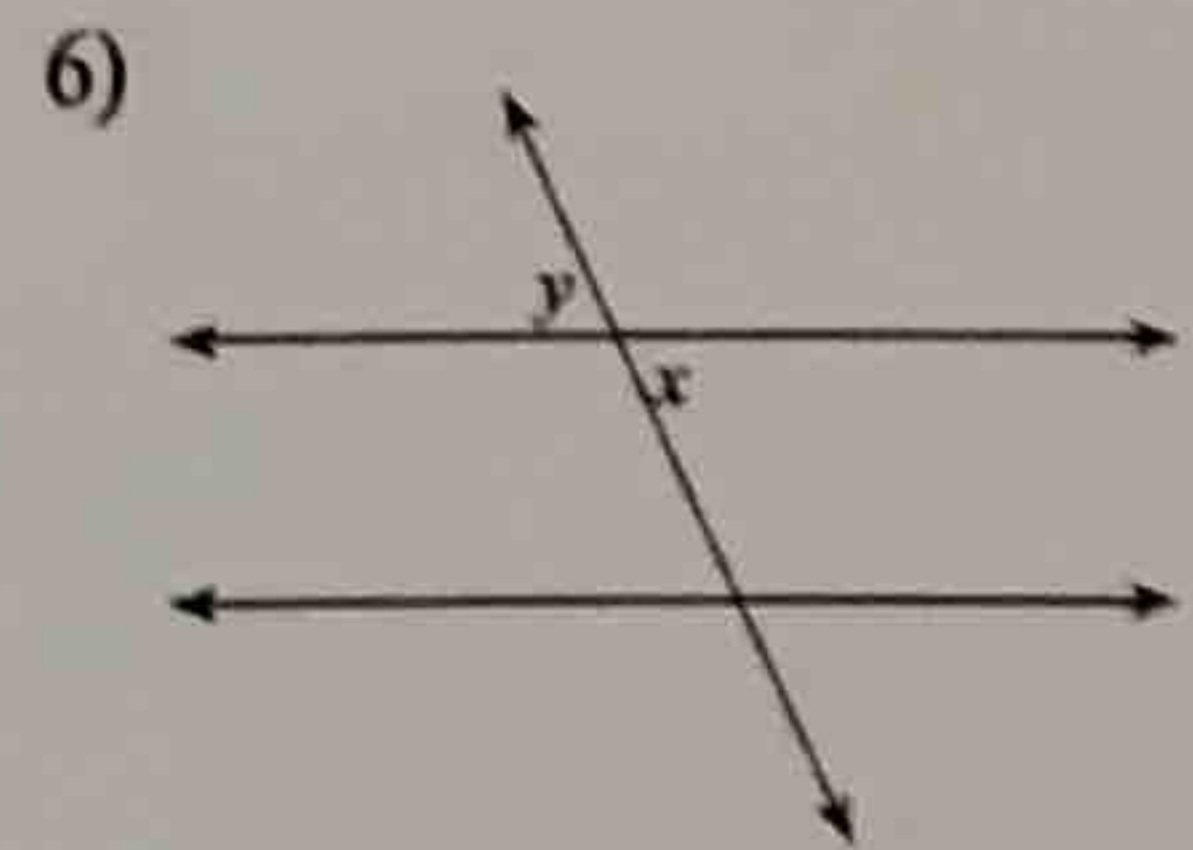
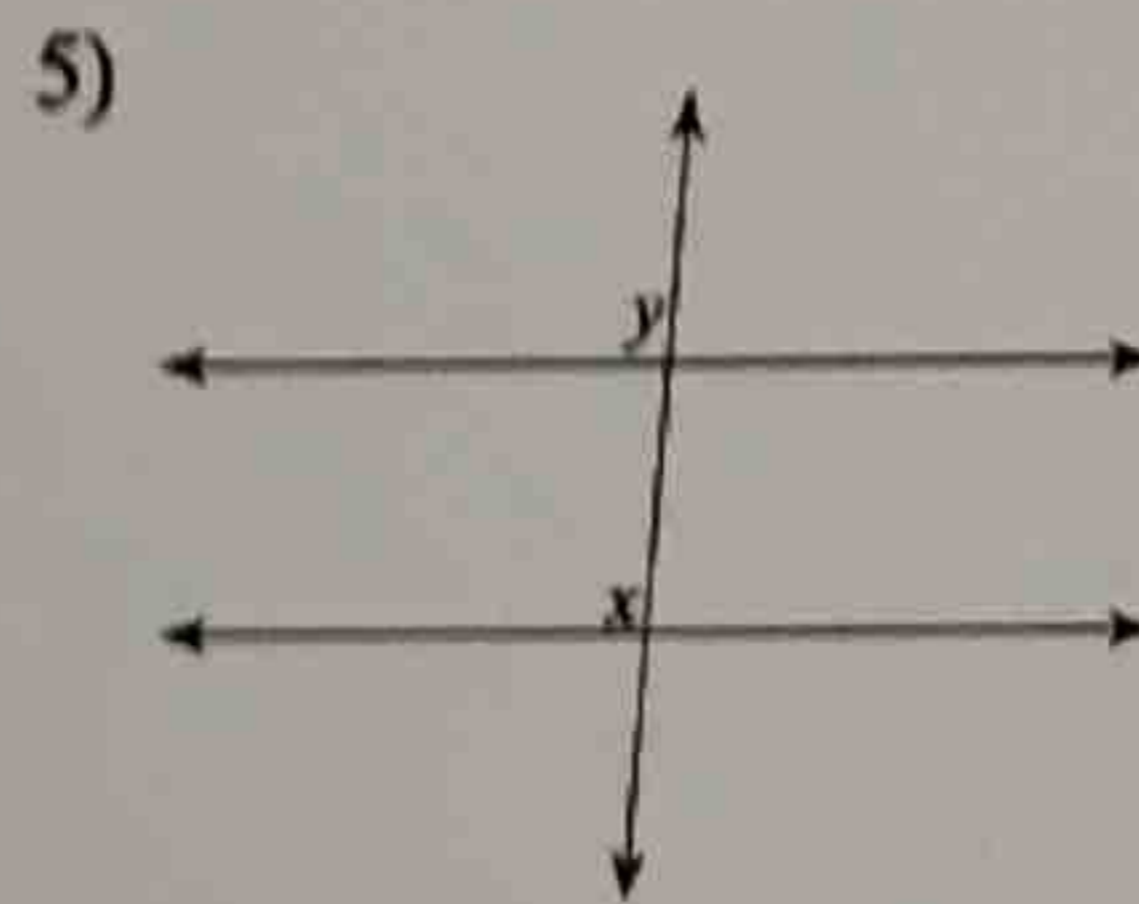
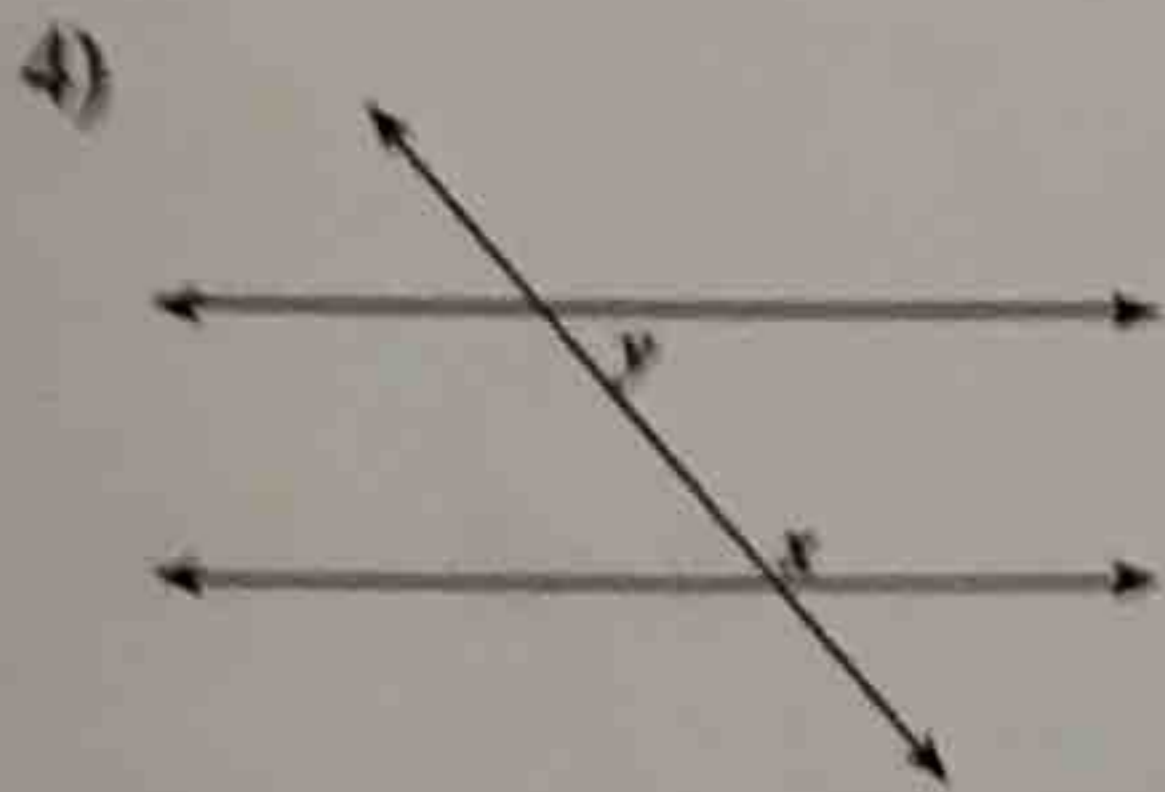
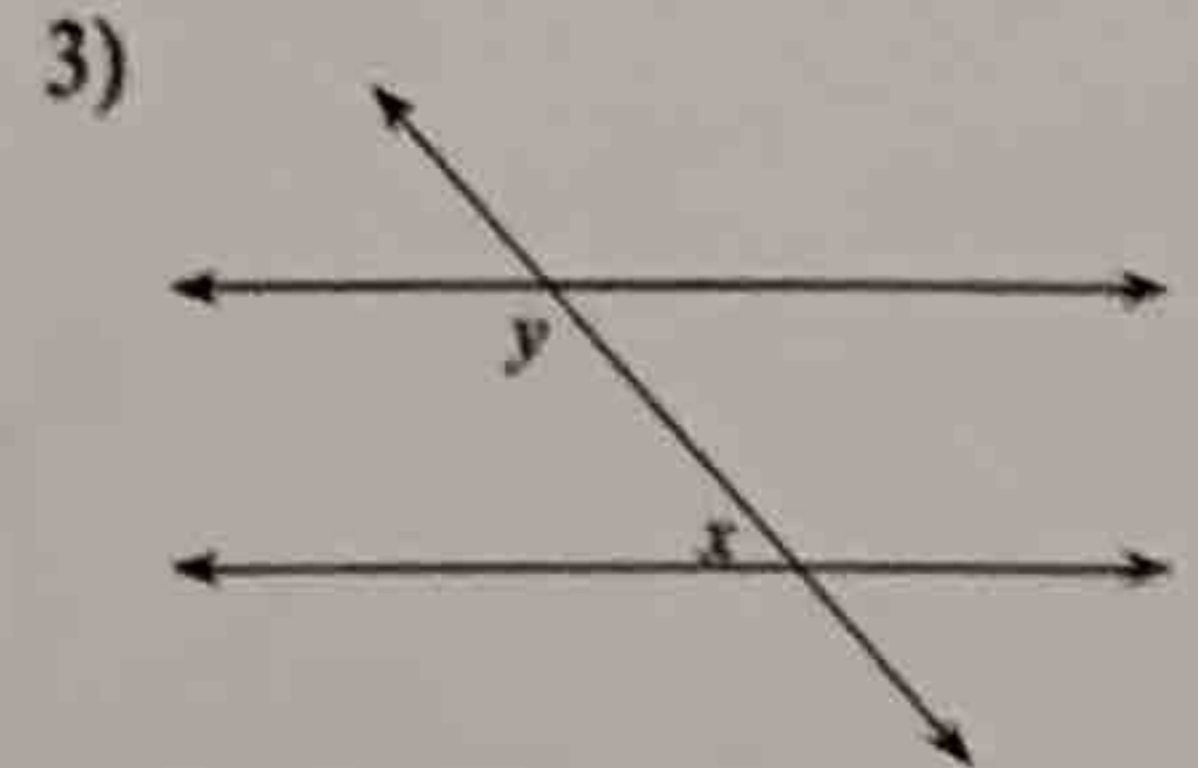
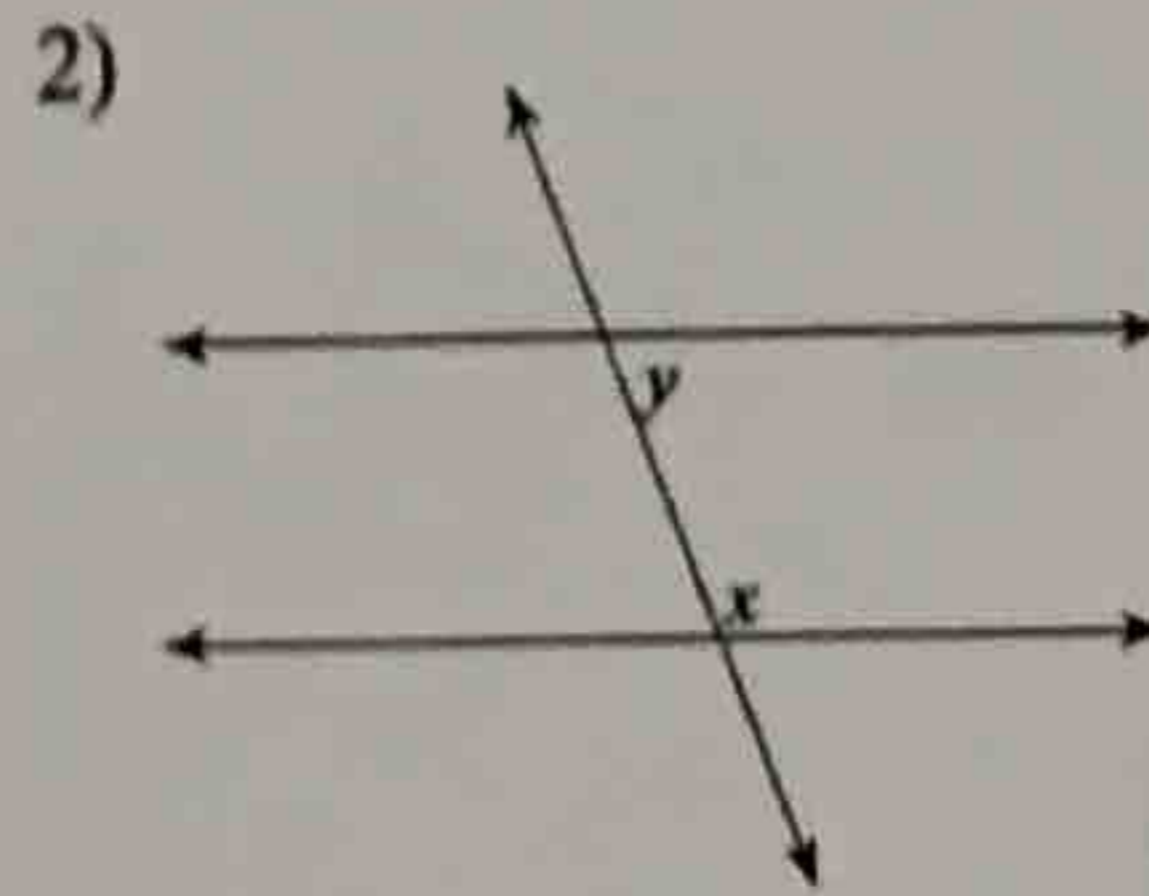
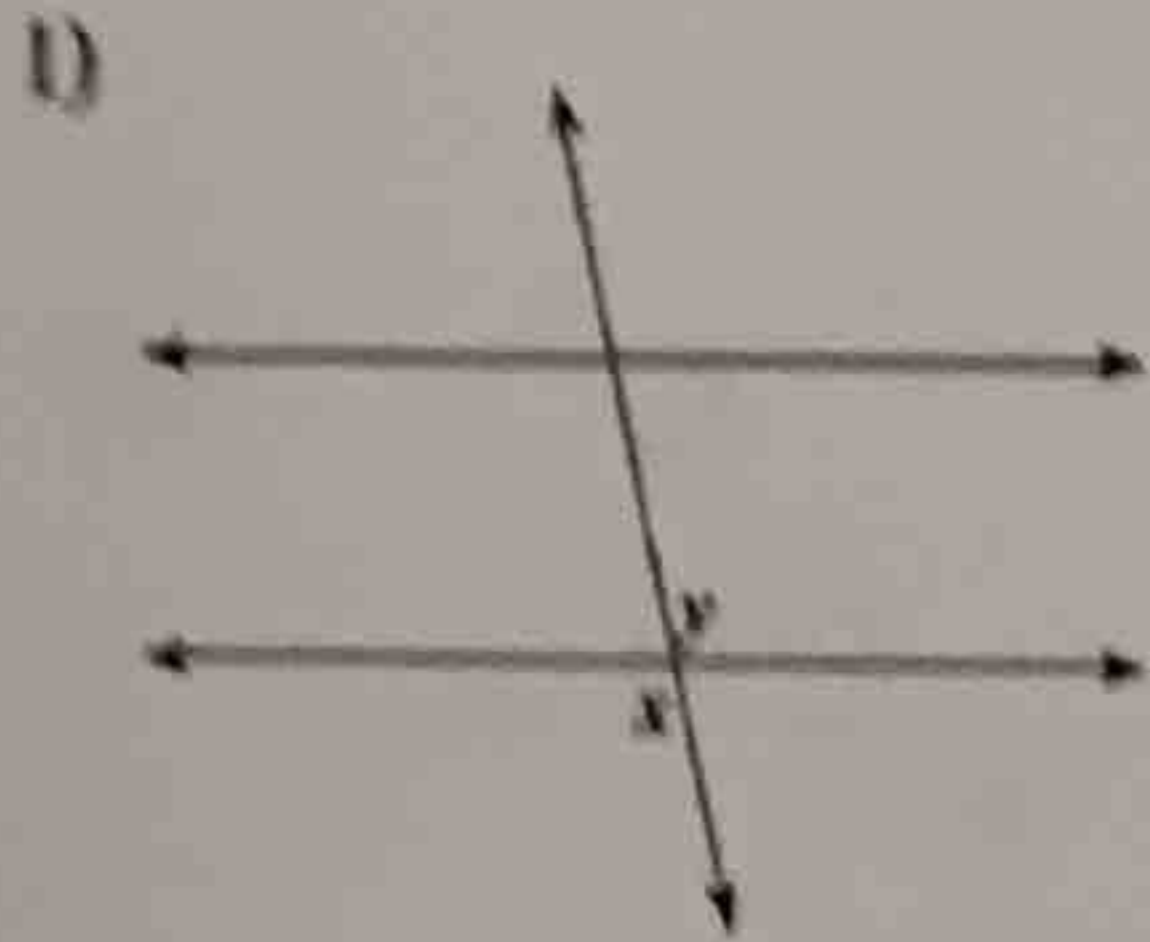


Name: _____

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

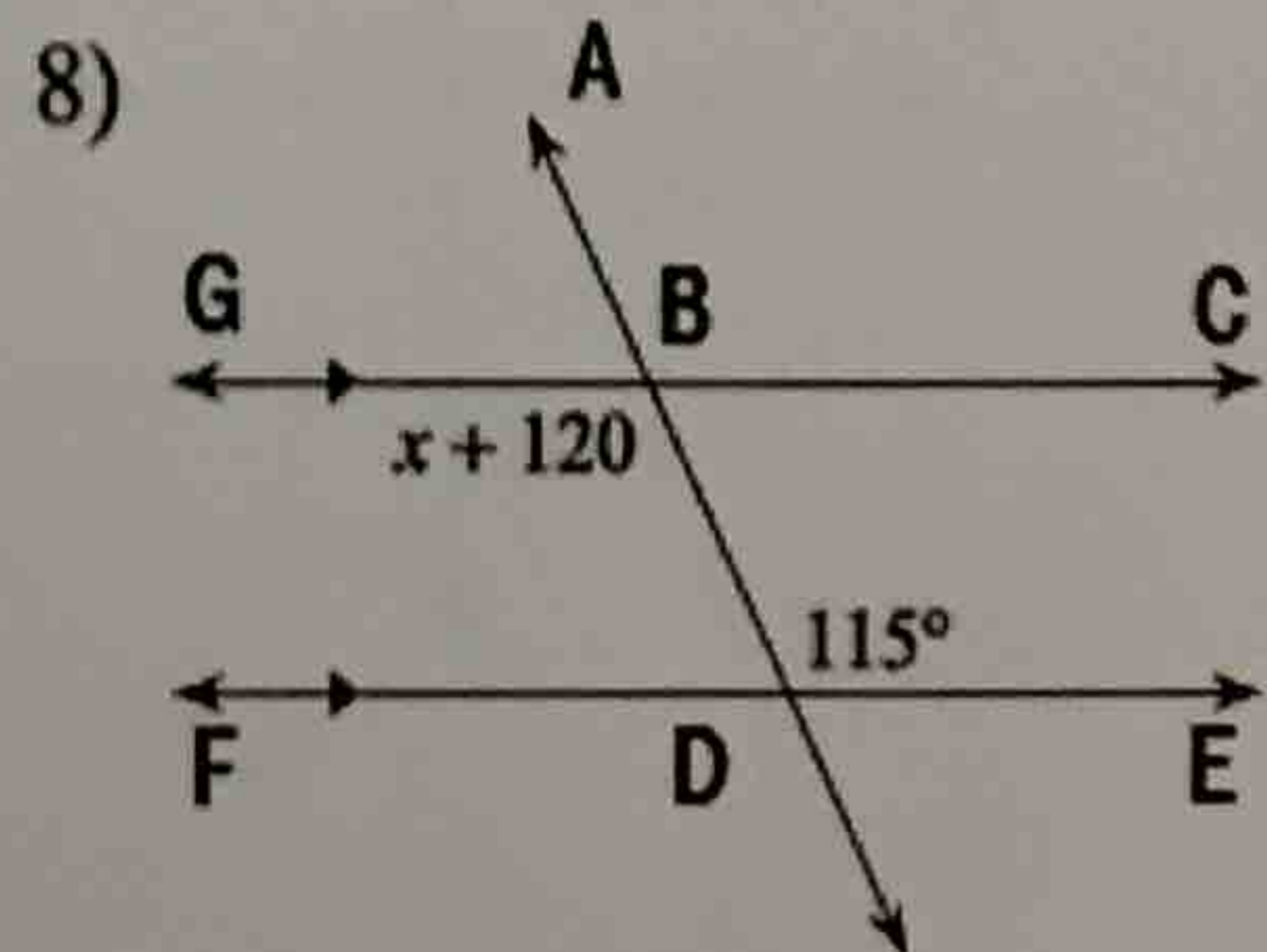
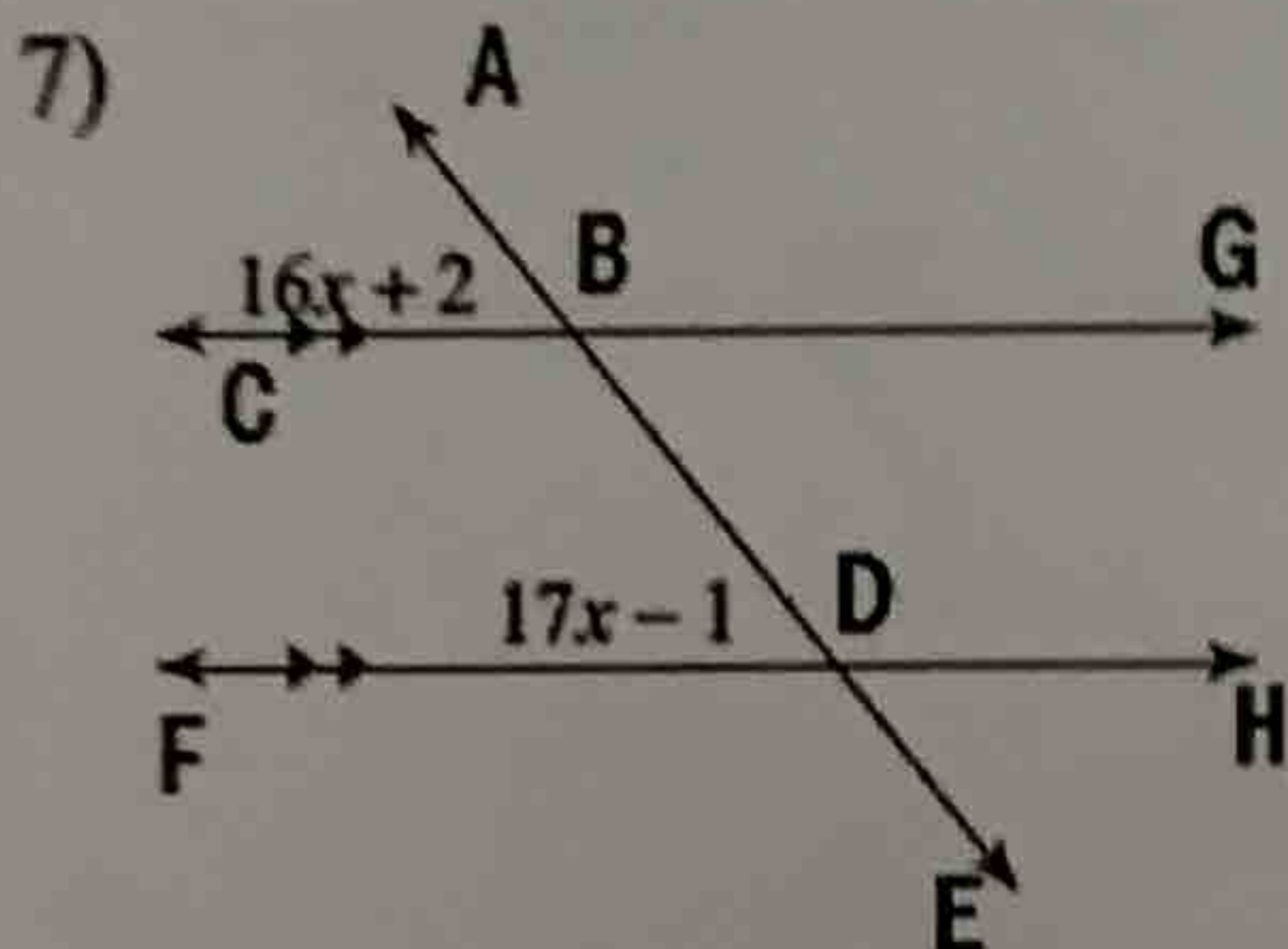
Alternate exterior angles are congruent

Consecutive interior angles are supplementary

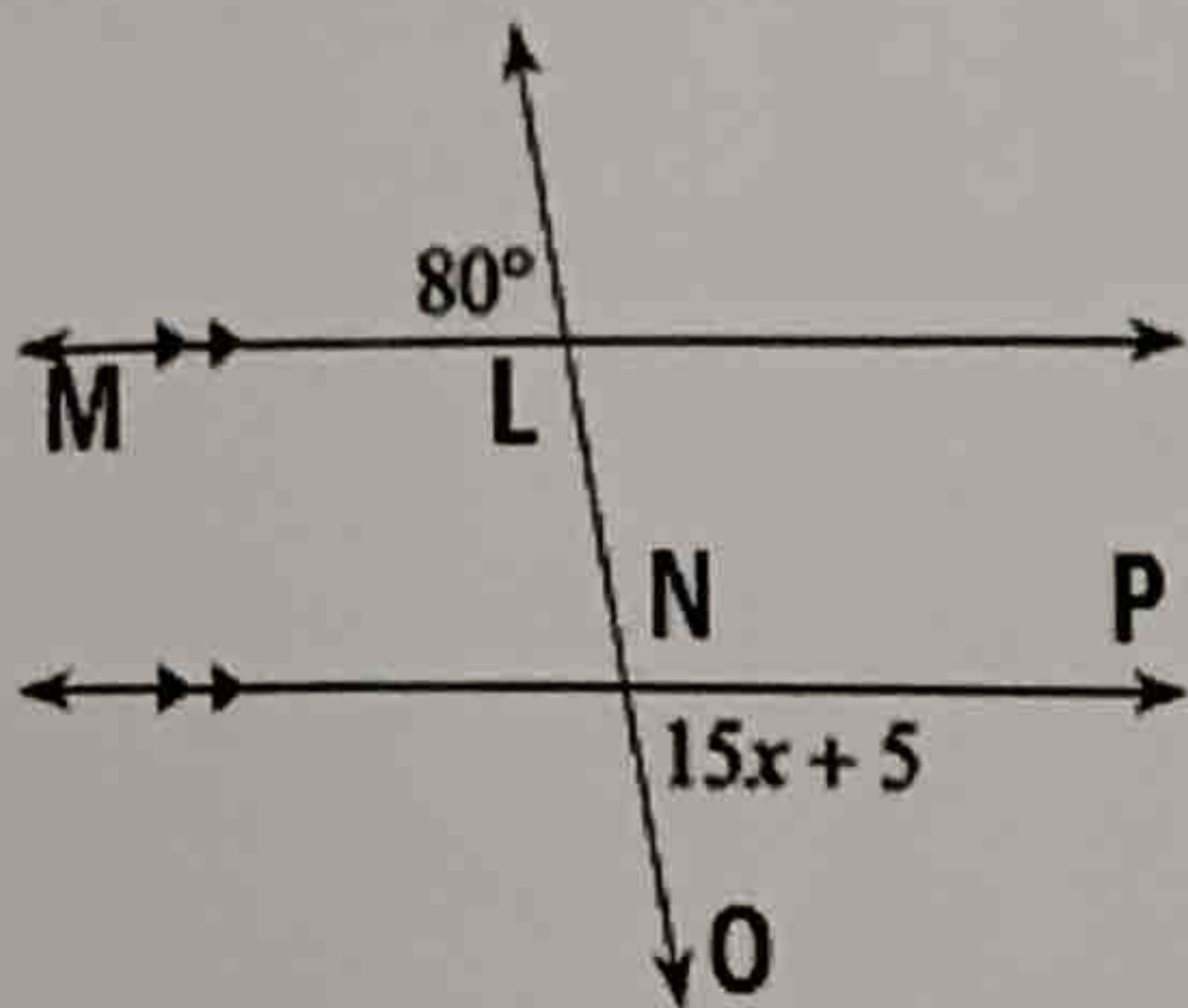
Linear pairs are supplementary

Vertical angles are congruent

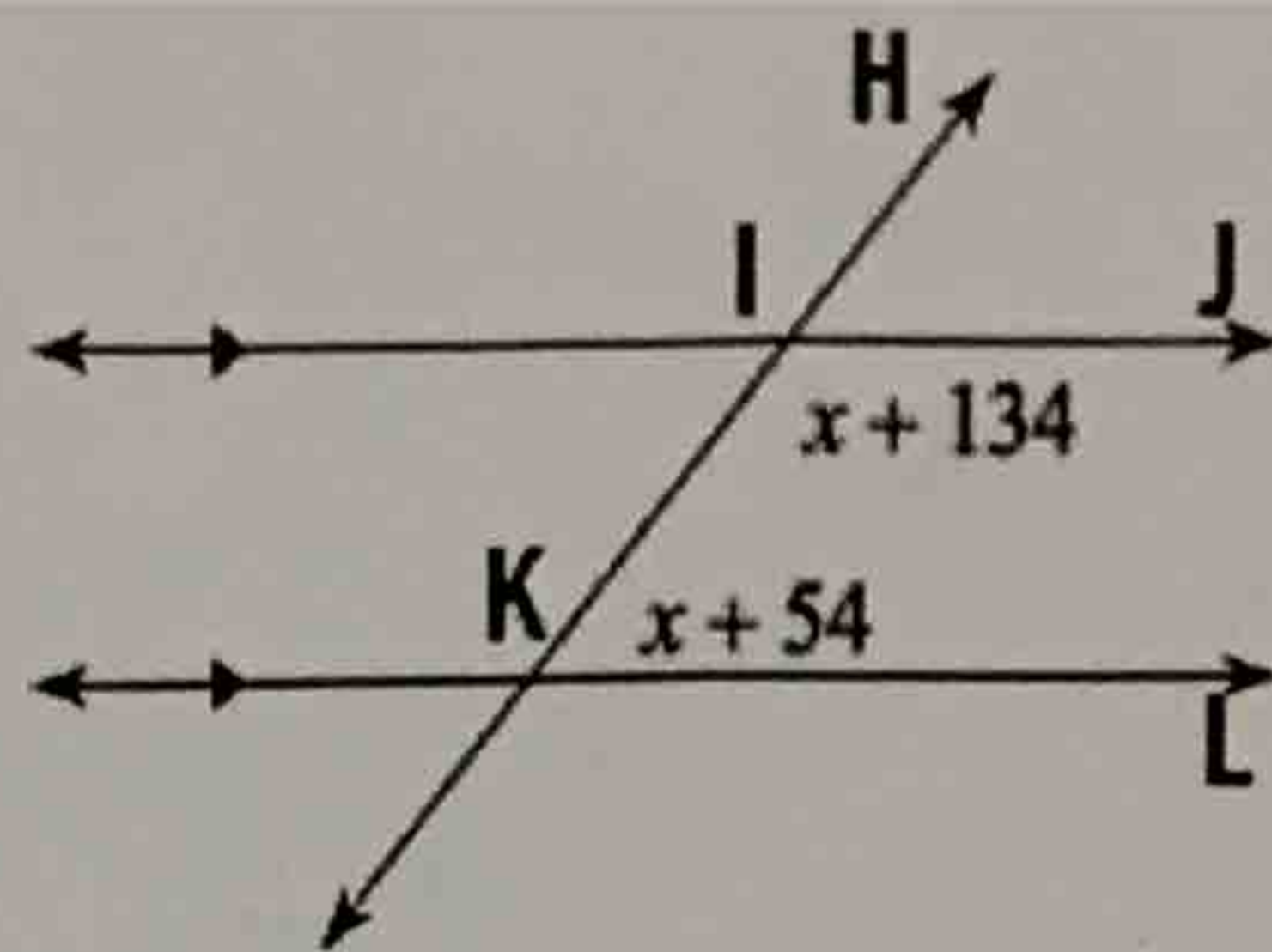
Solve for x .



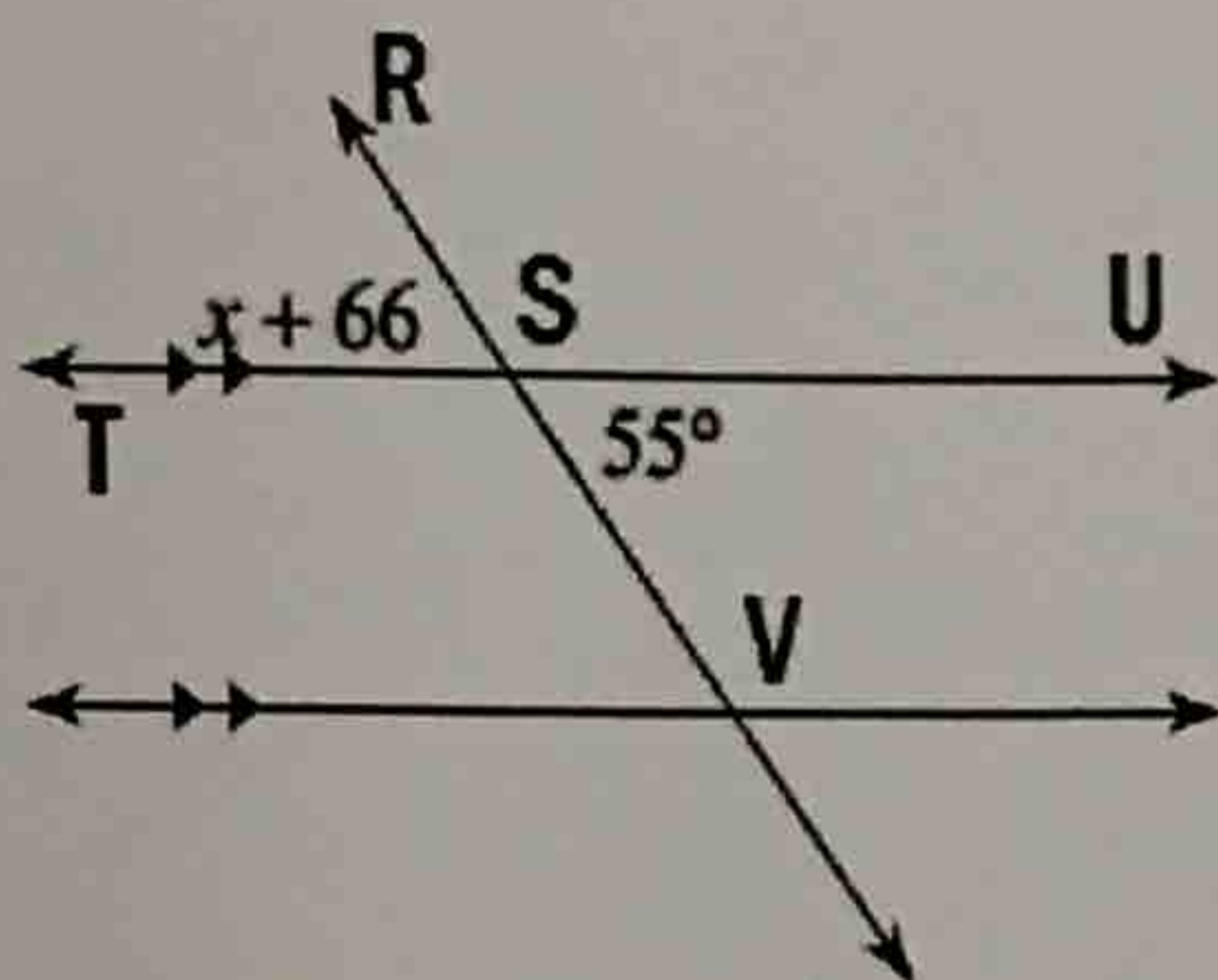
9)



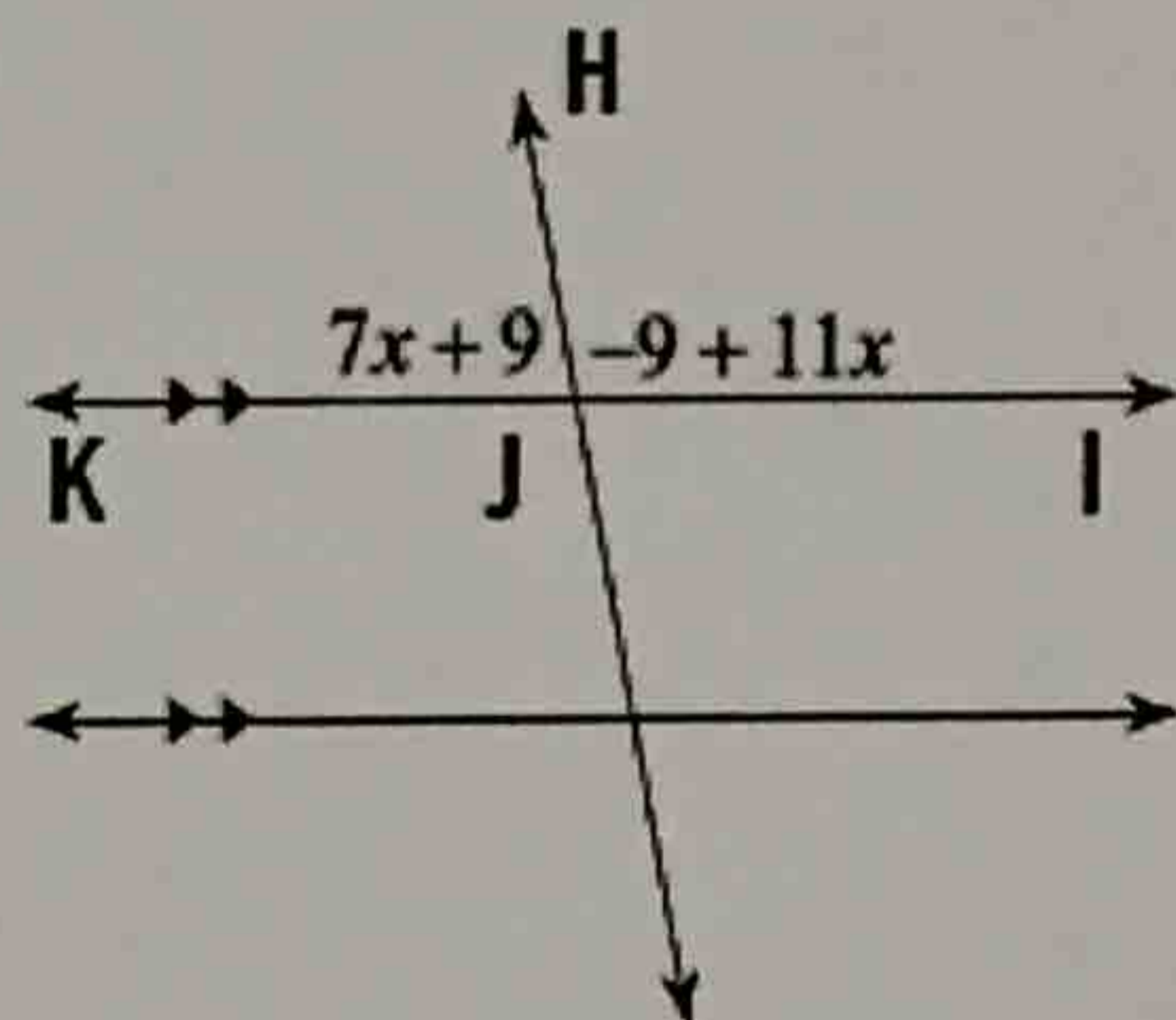
10)



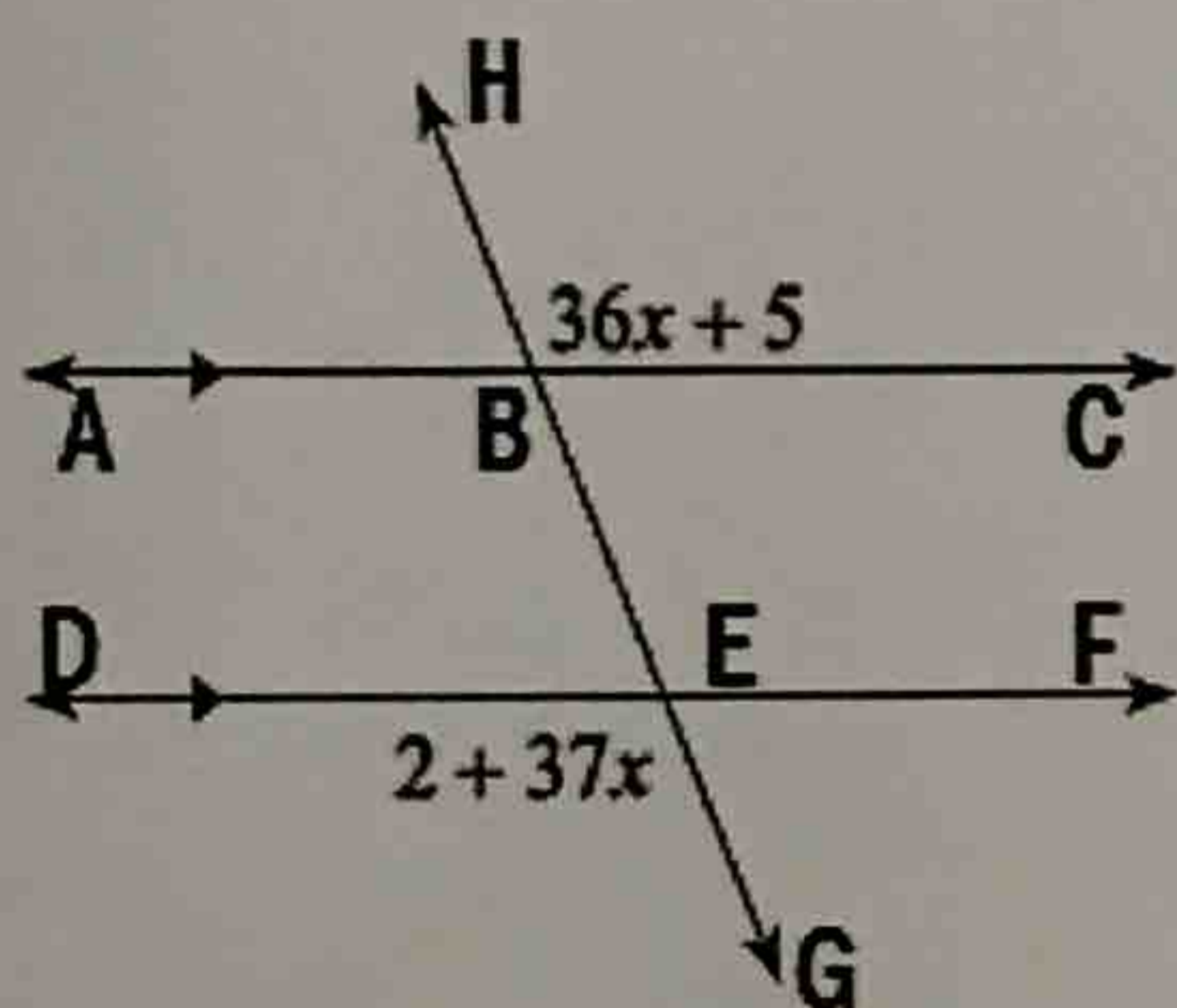
11)



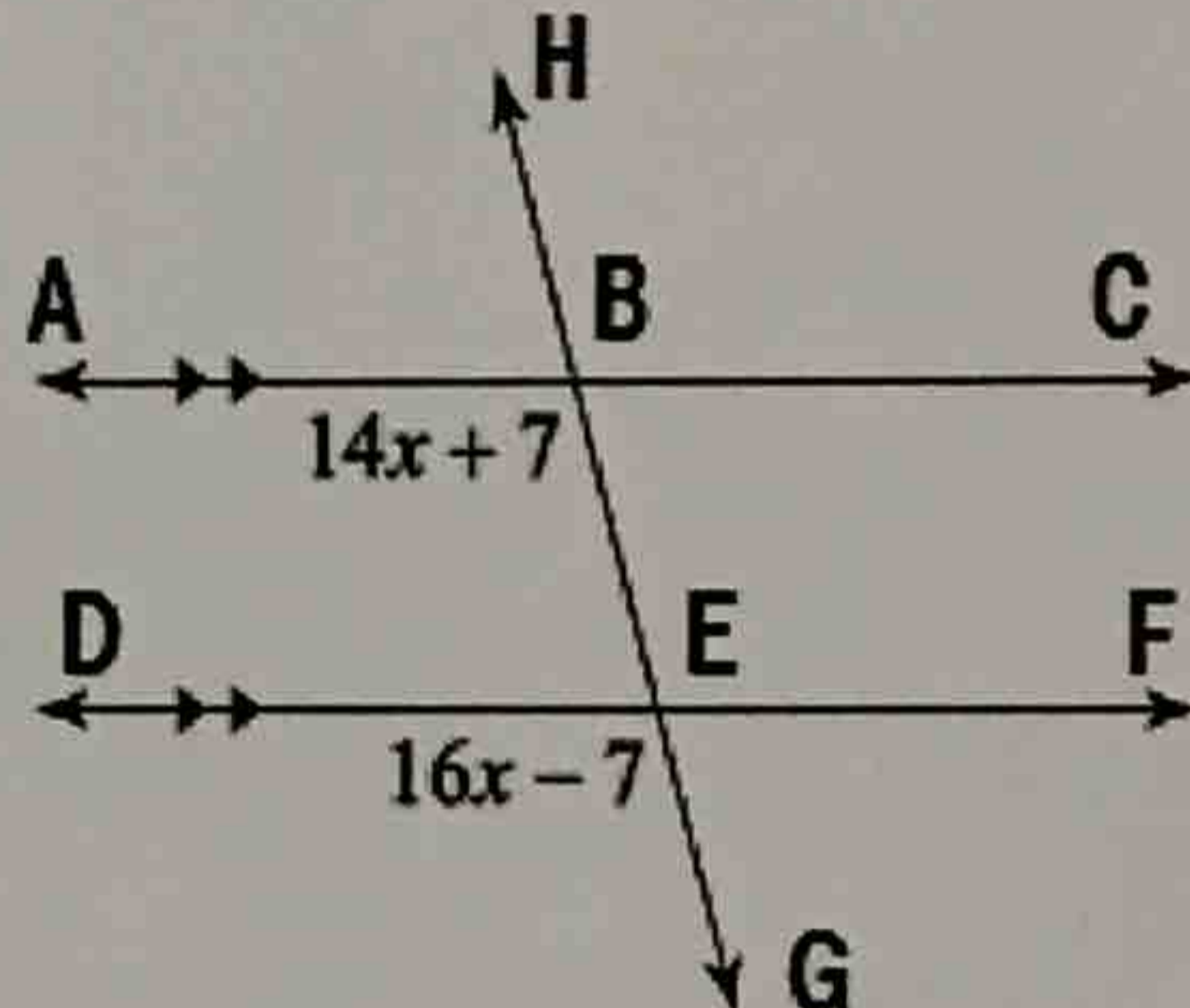
12)

Solve for x .

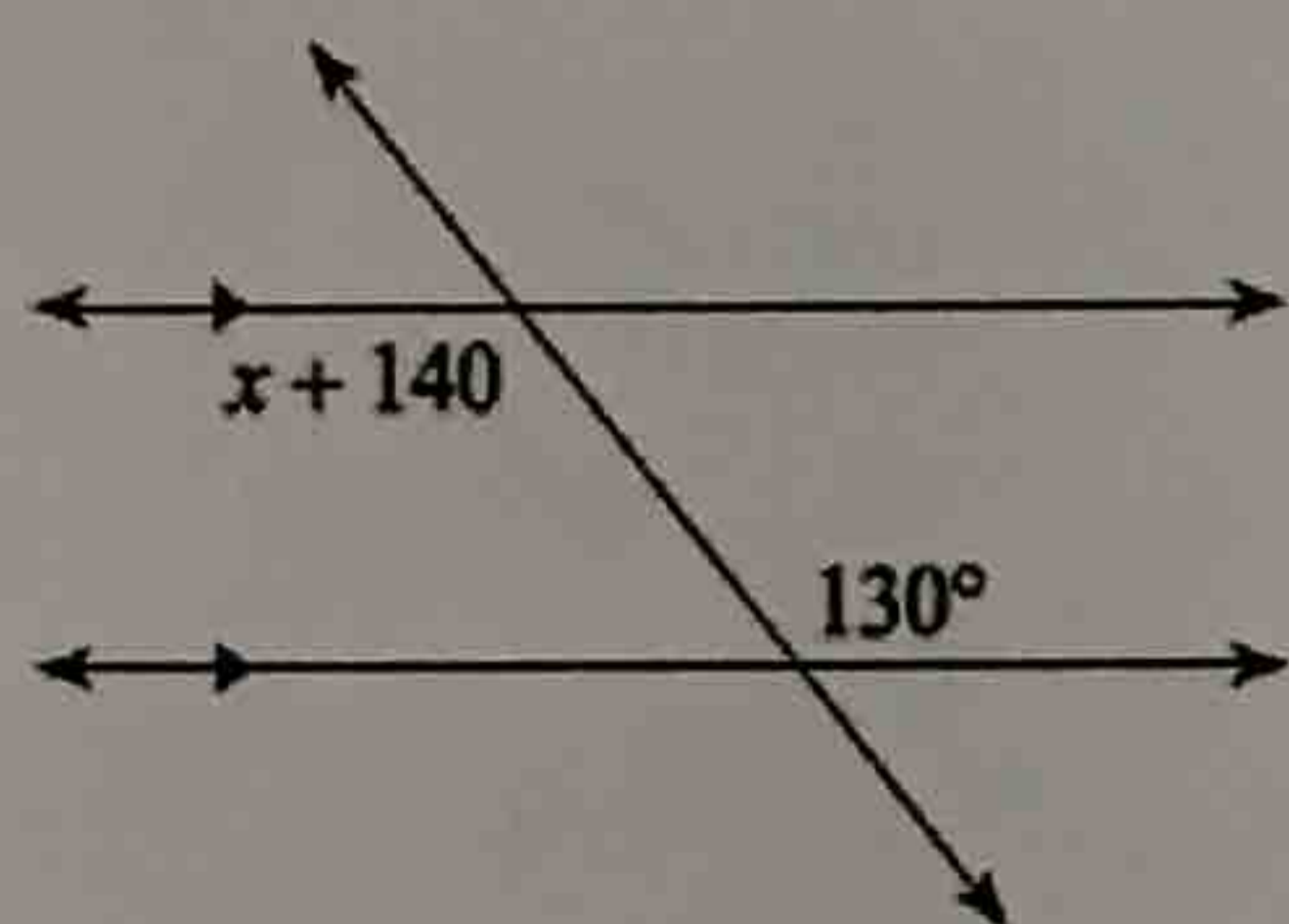
13)



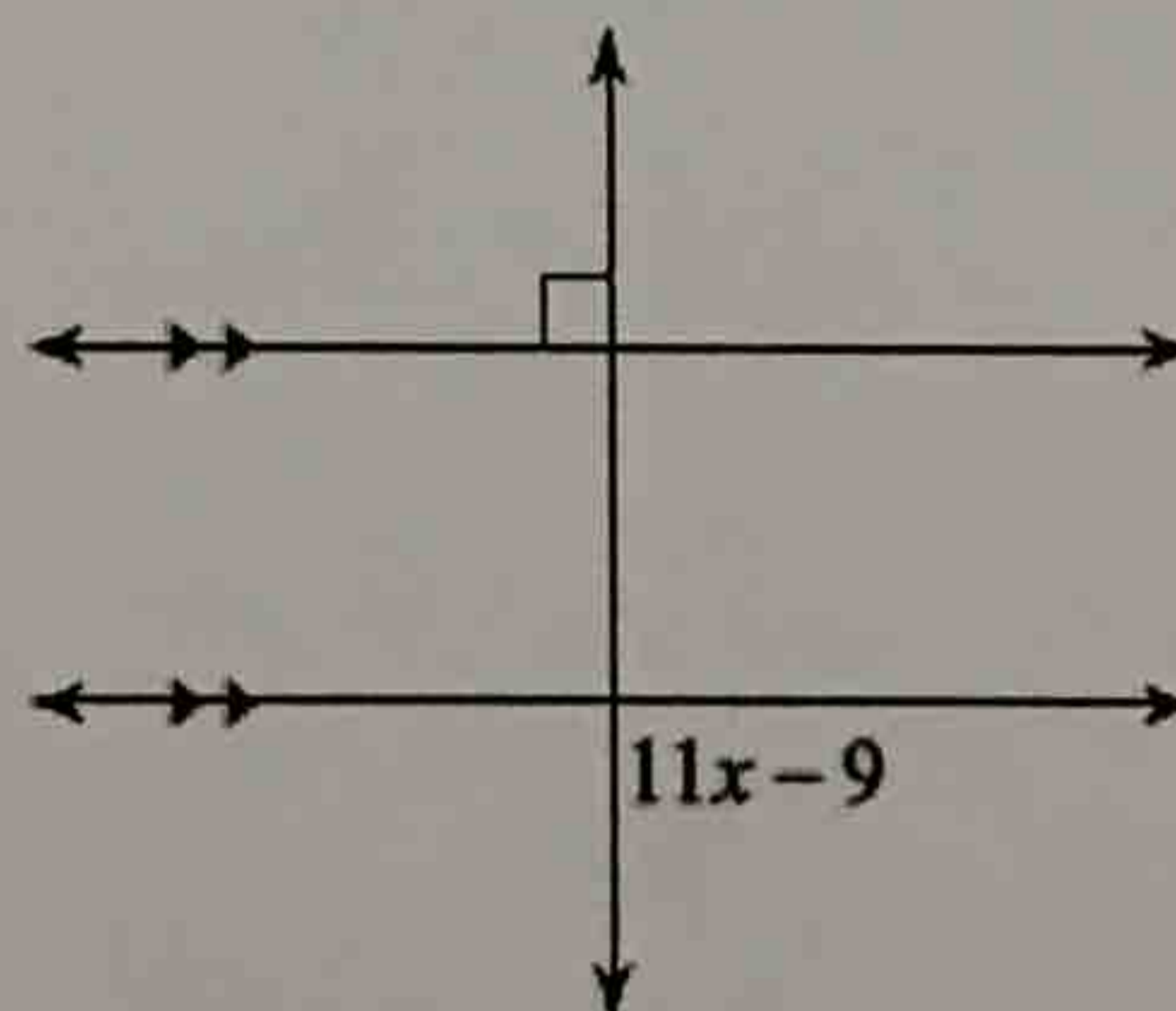
14)

Just solve for x and justify. No geometry.

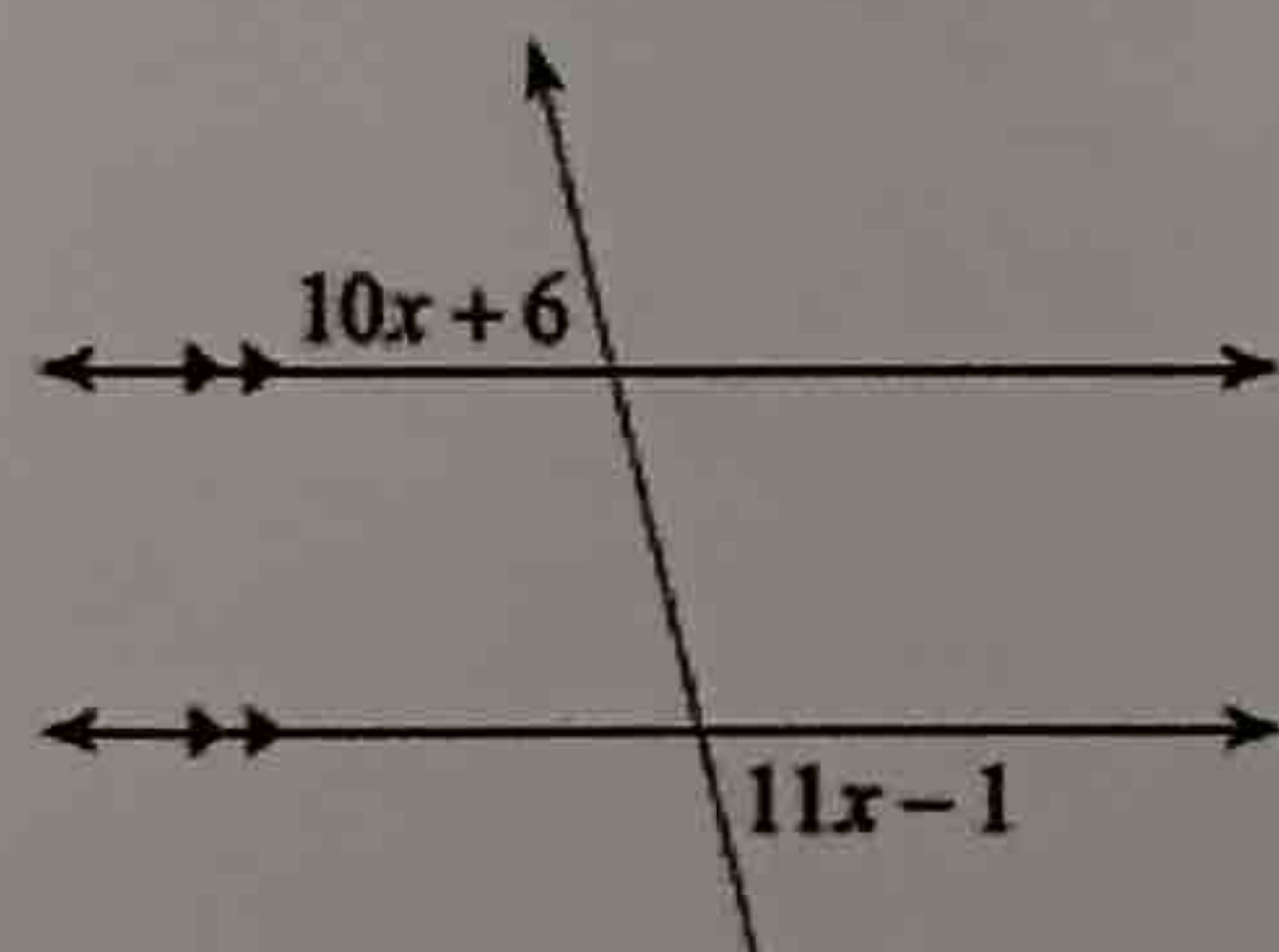
15)



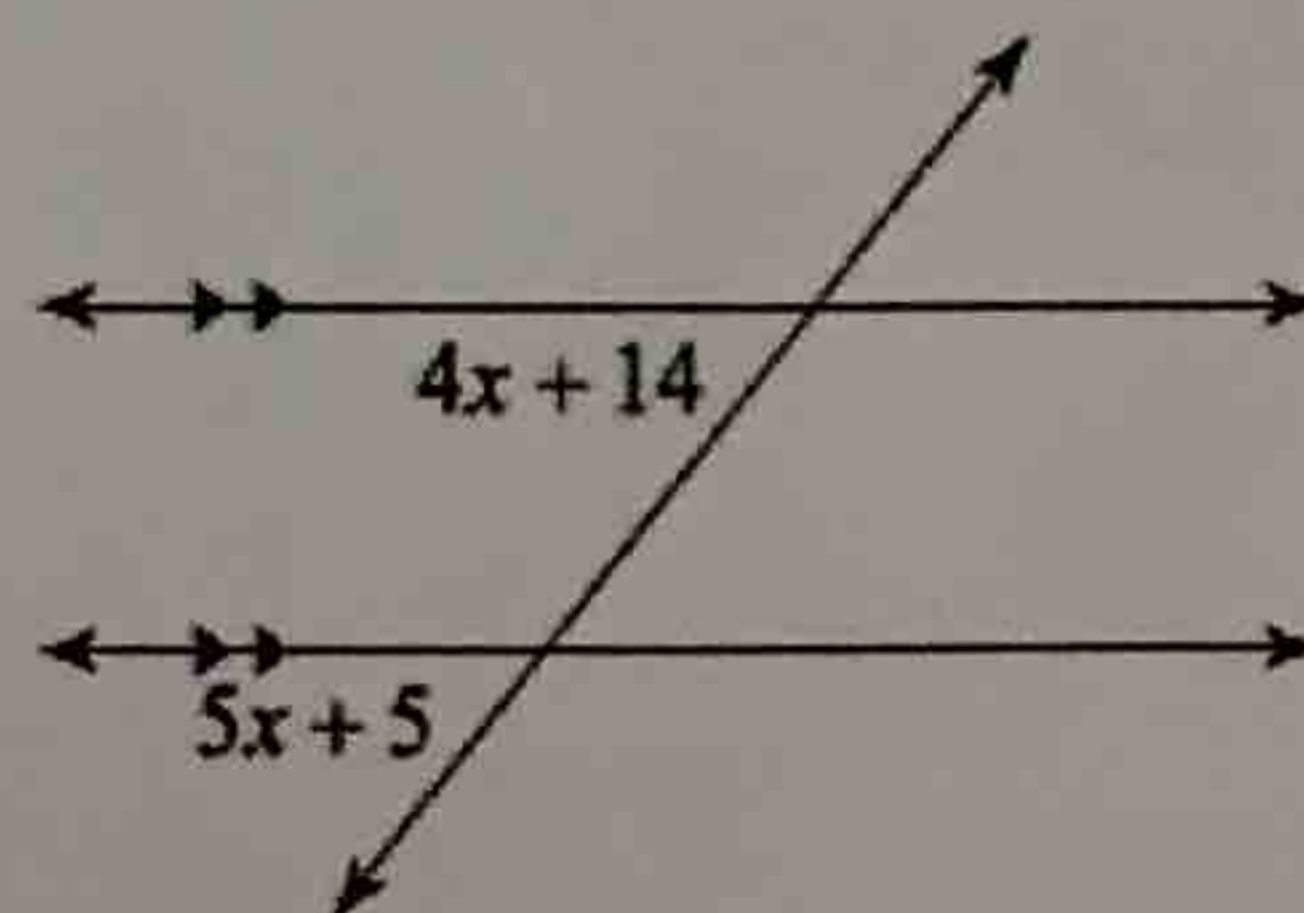
16)



17)



18)

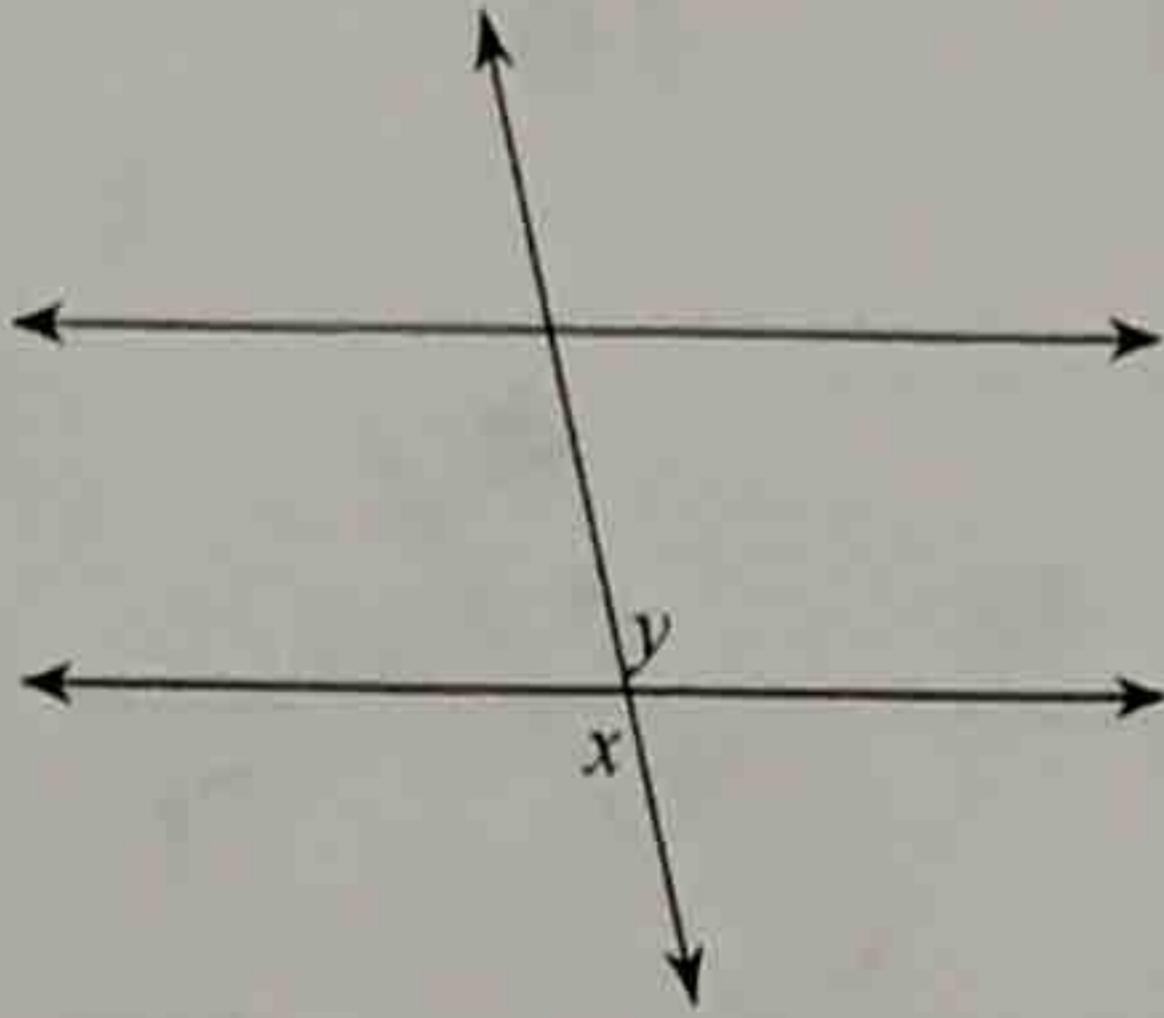


Parallels Cut by a Transversal: Day 2 HW

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

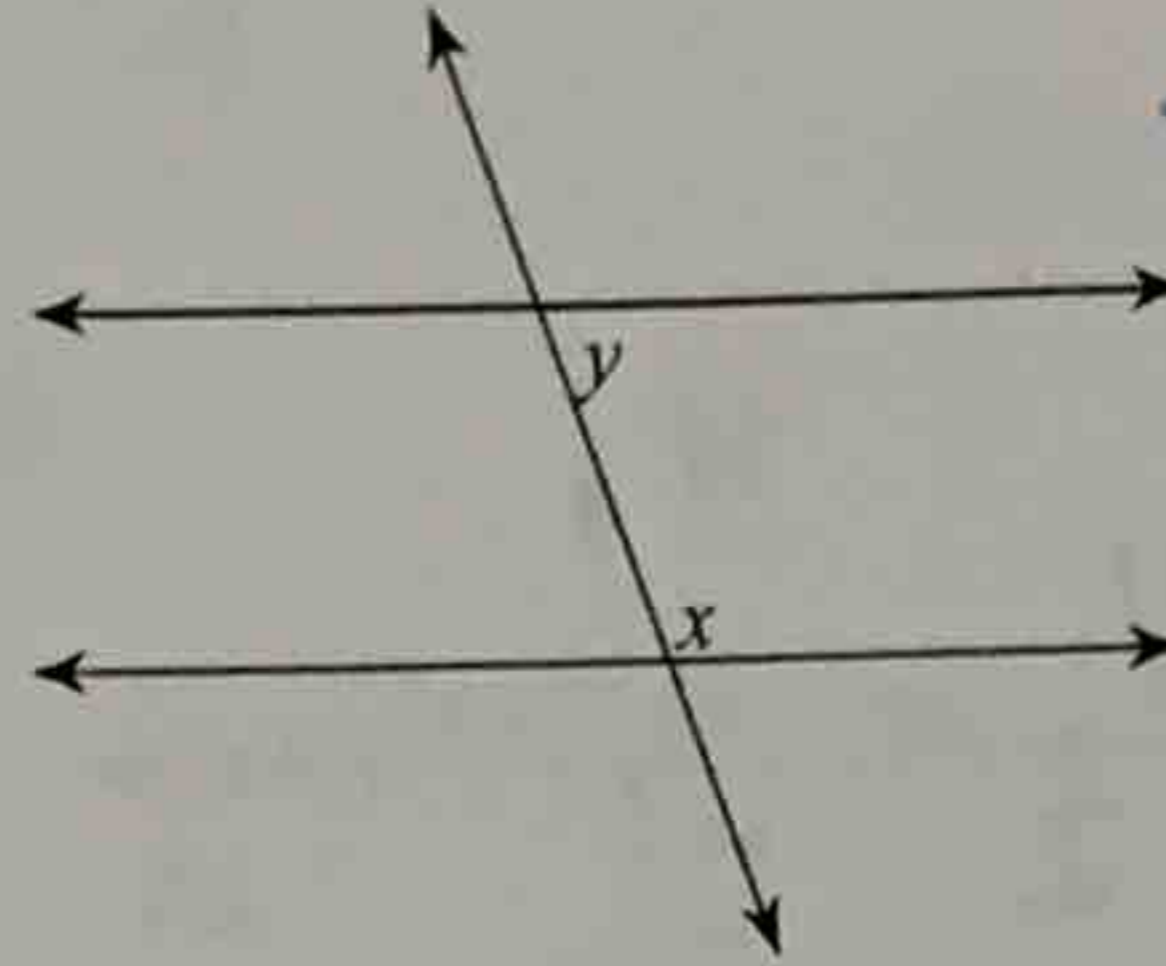
** These are the exact questions on the HW **

1)



vertical

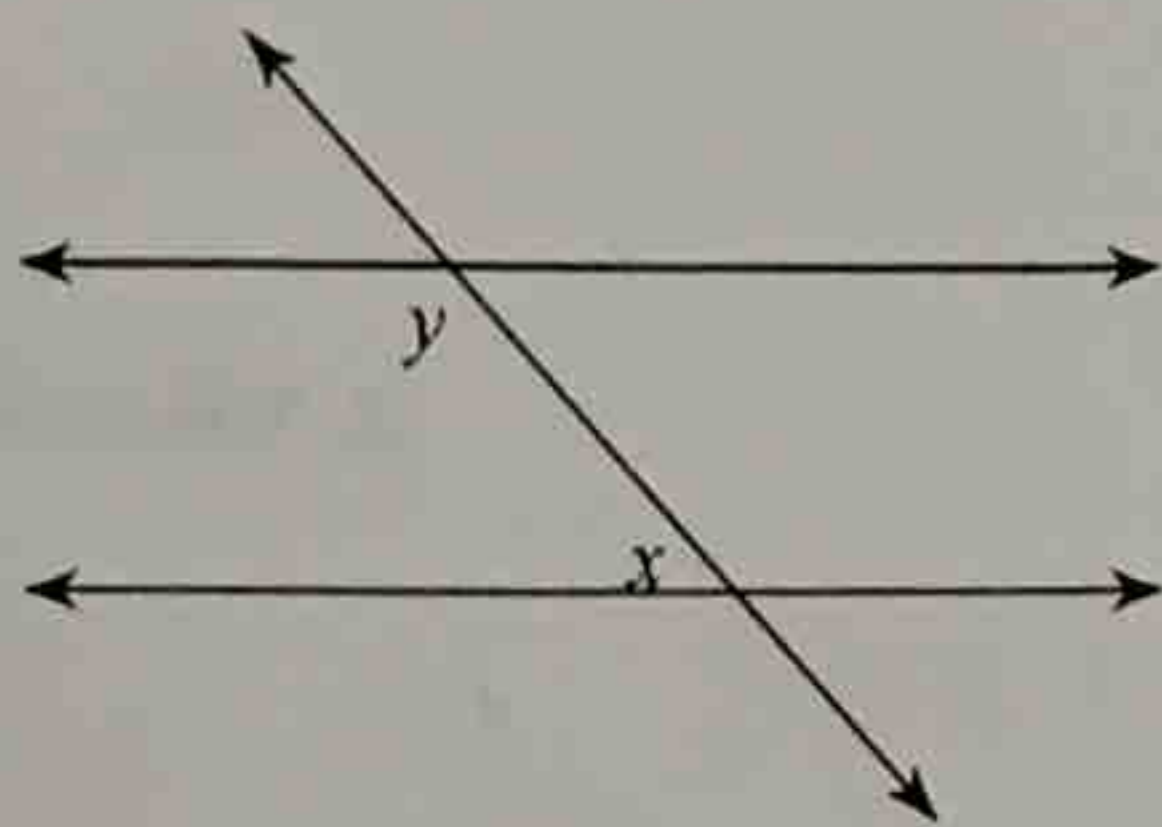
2)



consecutive interior

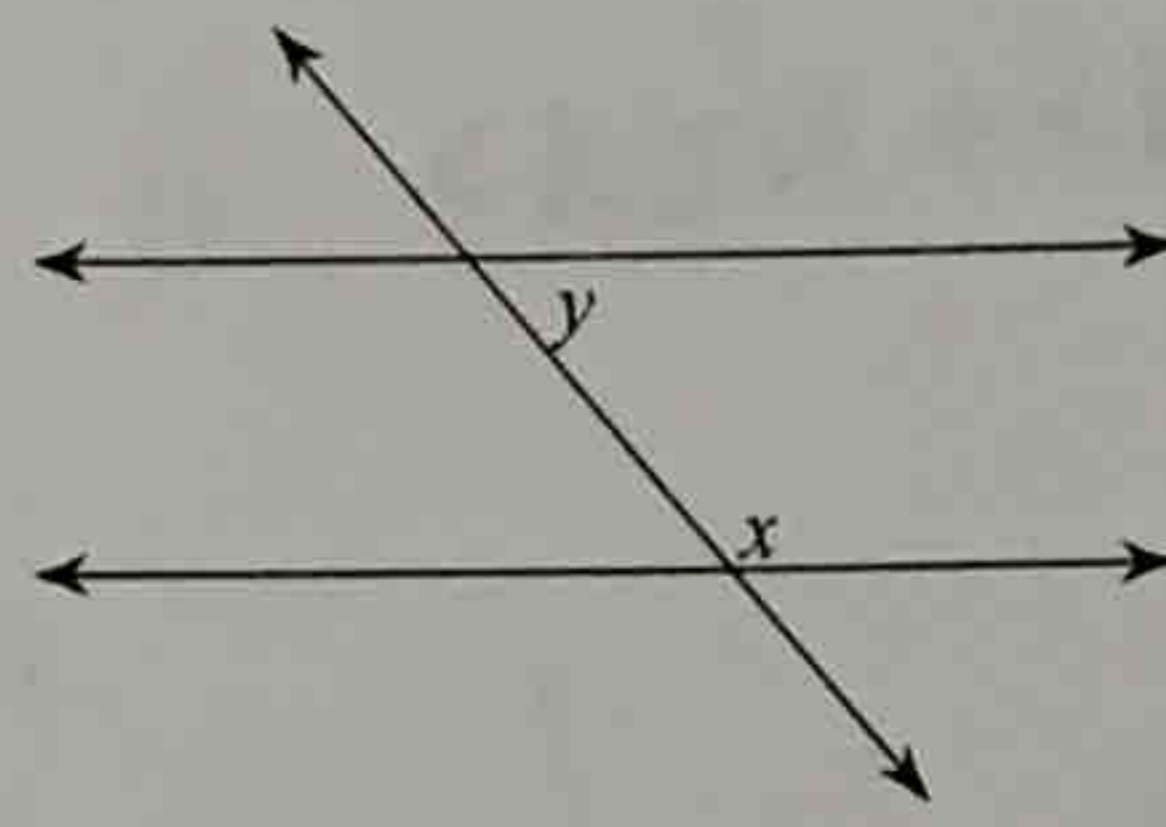
They have been re done to give you more space to work!

3)



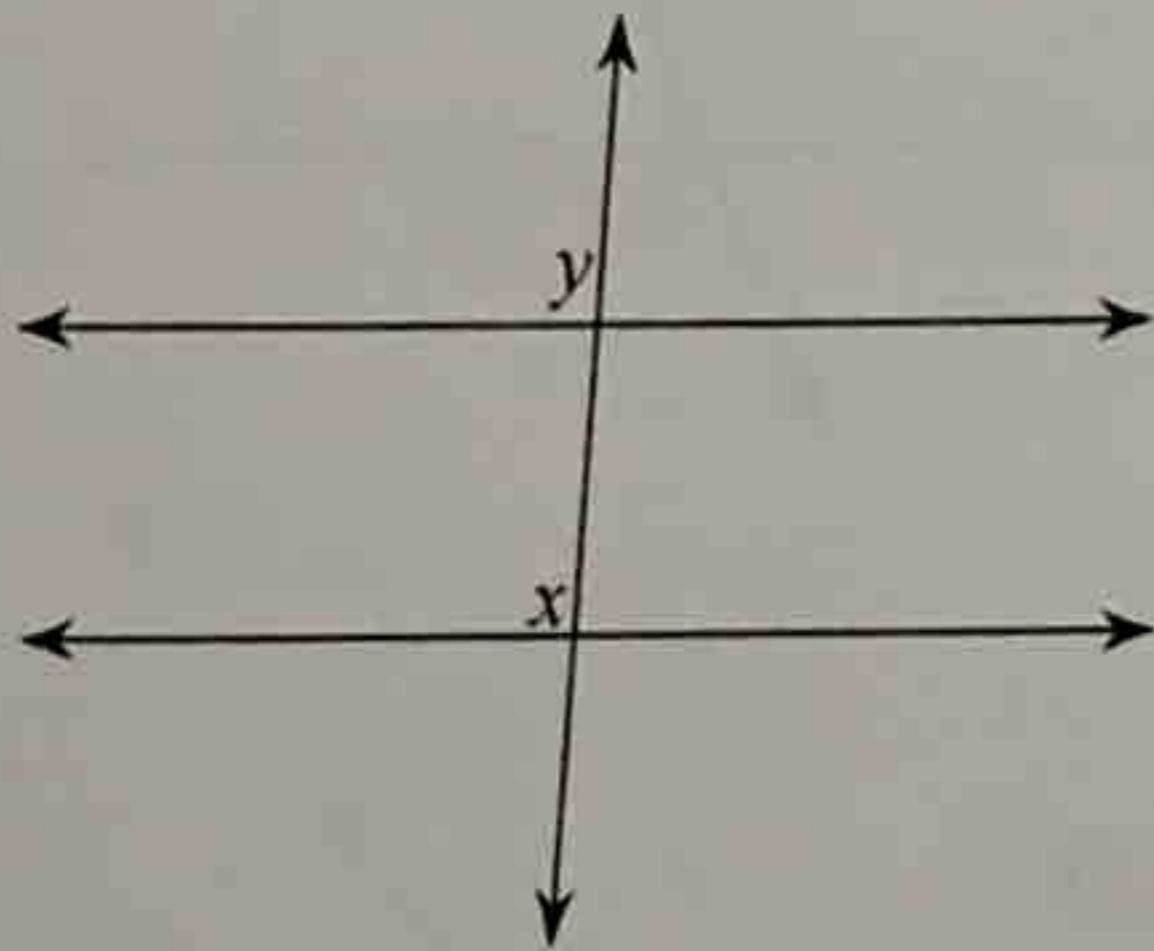
consecutive interior

4)



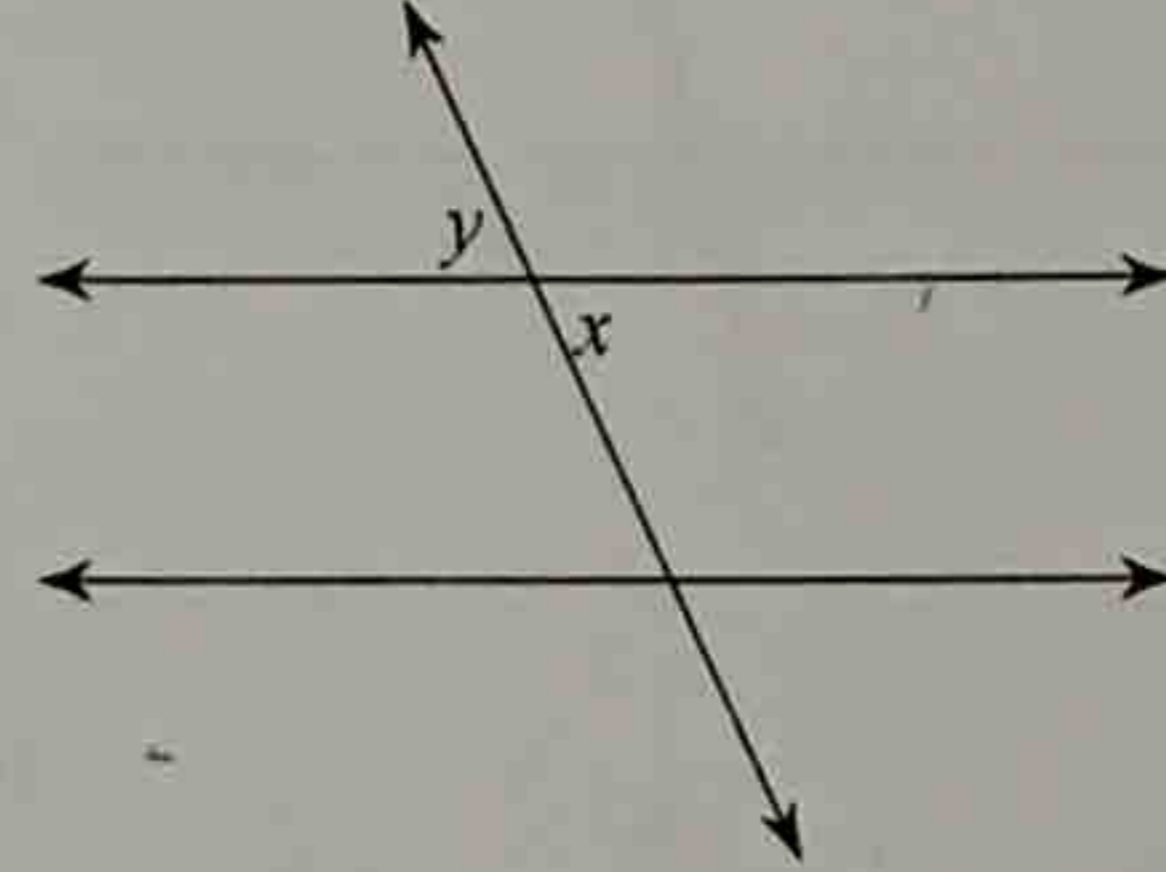
consecutive interior

5)



corresponding

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

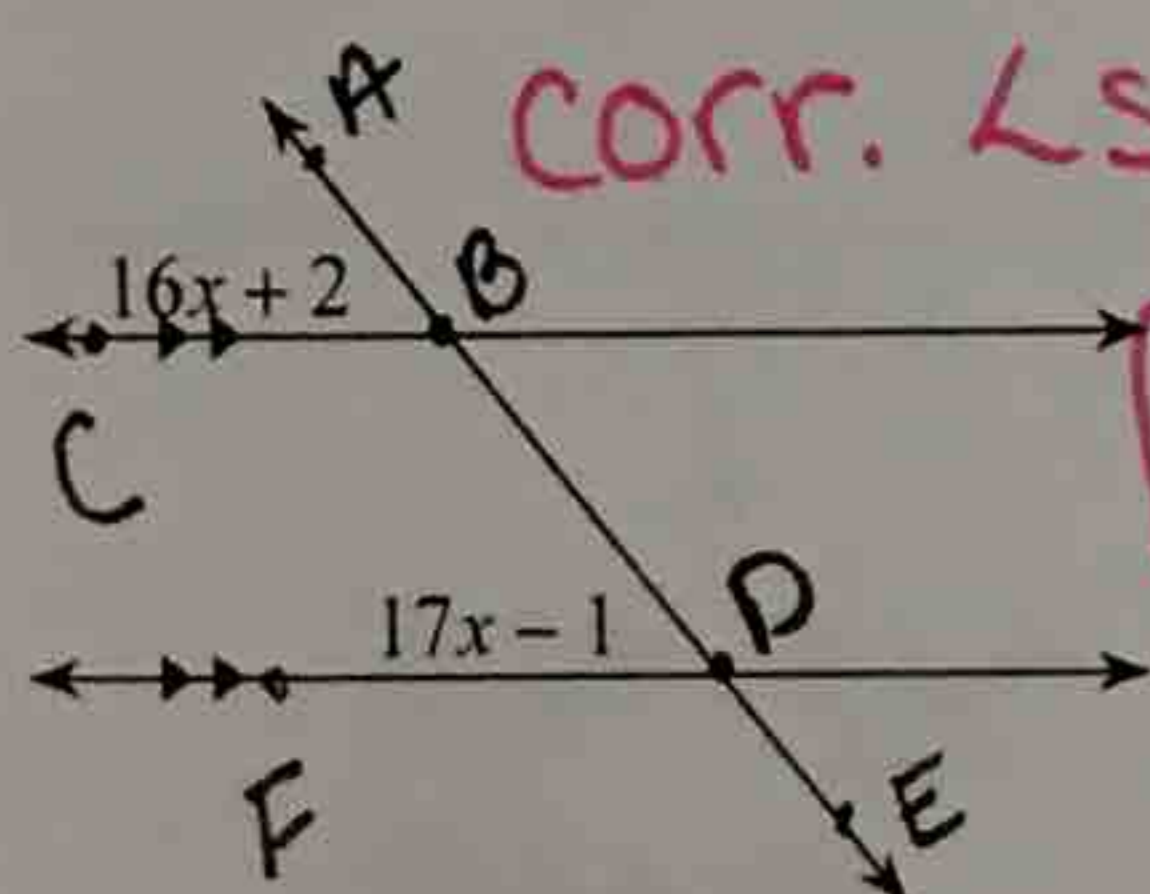
Linear pairs are supplementary

Vertical angles are congruent

Solve for x.

$\angle ABC \cong \angle FDE$

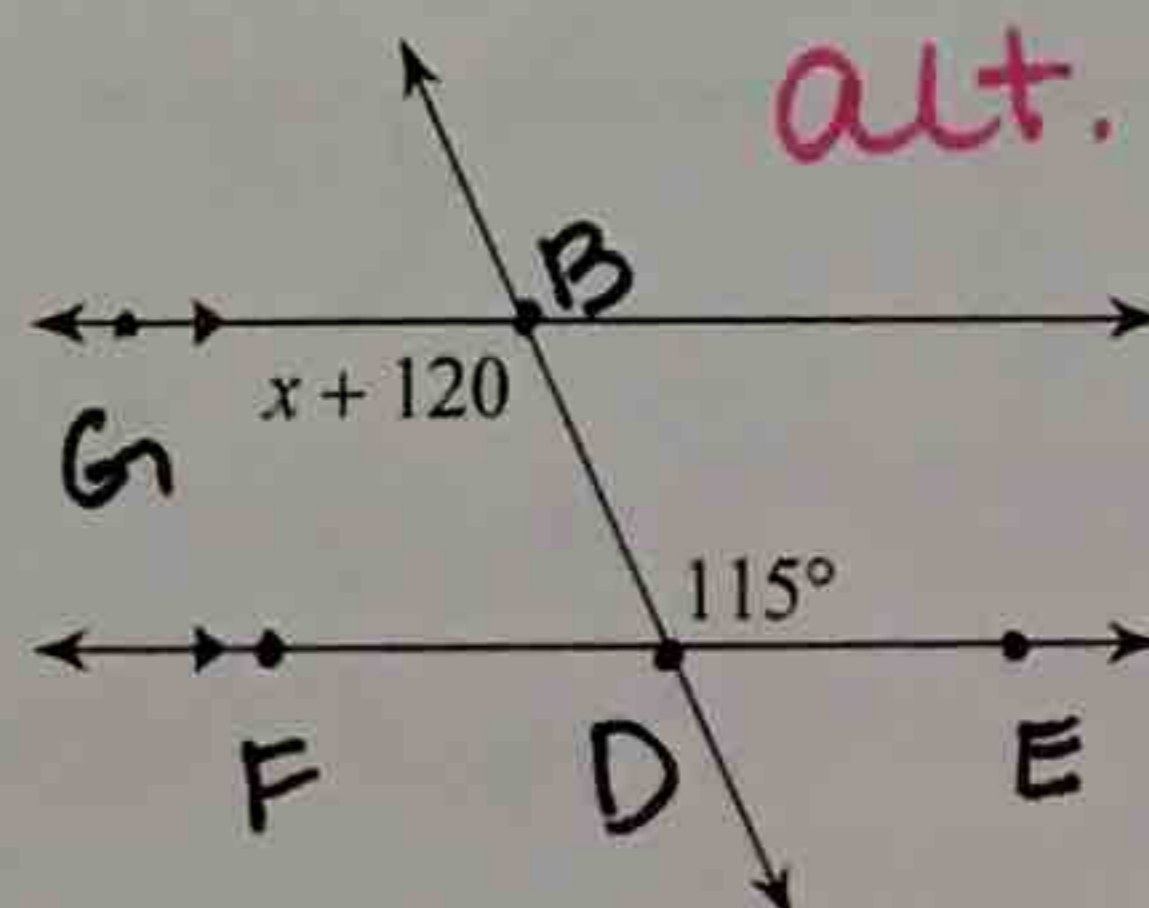
7)



corr. \angle s are \cong

$x = 3$

8)



$\angle GBD \cong \angle BDE$

alt. int. \angle s are \cong

$x = -5$

9)

 $\angle KLM \cong \angle PNO$
 $80 = 15x + 5$
 alt. ext. \angle s are \cong
 $x = 5$

10)

 consecutive int \angle s are suppl.
 $x + 134 + x + 54 = 180$
 $2x + 188 = 180$
 $-188 -188$
 $\frac{2x}{2} = \frac{-8}{2}$
 $x = -4$

11)

 $\angle RST \cong \angle USV$
 vertical \angle s are \cong
 $x = -11$

12)

 linear pairs are suppl.
 $x = 10$

Solve for x.

13)

 $36x + 5 = 2 + 37x$
 alt ext \angle s are \cong
 $x = 3$

14)

 corr. \angle s are \cong
 $x = 7$

15)

 alt int \angle s are \cong
 $x = -10$

16)

 $11x - 9 = 90$
 alt. ext \angle s are \cong
 $x = 9$

17)

 alt. ext \angle s are \cong
 $x = 7$

18)

 $4x + 14 = 5x + 5$
 corresponding \angle s are \cong
 $x = 9$