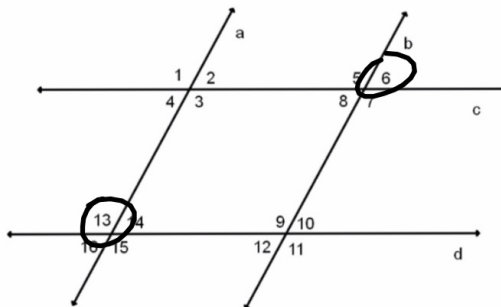


1. Given: $a \parallel b$ and $c \parallel d$
 Prove: $\angle 6$ & $\angle 13$ are supplementary

Start by planning it out

Statement	Reason
1. $a \parallel b$ and $c \parallel d$	1. Given

- ② $\angle 1$ & $\angle 13$ are suppl. ② SSE
 ③ $\angle 1 \cong \angle 13$ ③ Corresp.
 ④ $\angle 13$ & $\angle 6$ are suppl. ④ Subst.



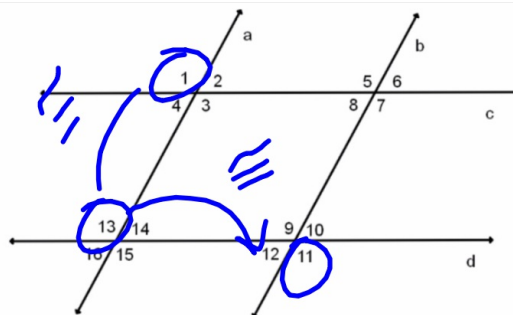
2. Given: $a \parallel b$ and $\angle 11 \cong \angle 1$

Prove: $c \parallel d$

Start by planning it out

Statement	Reason
1. $a \parallel b$ and $\angle 11 \cong \angle 1$	1. Given

- ② $\angle 11 \cong \angle 13$ ② alt ext
 ③ $\angle 13 \cong \angle 1$ ③ $\cong$ subst.
 ④ $c \parallel d$ ④ conv. corresp. $\angle$'s post.



3. What value of x will make lines a and b parallel?

