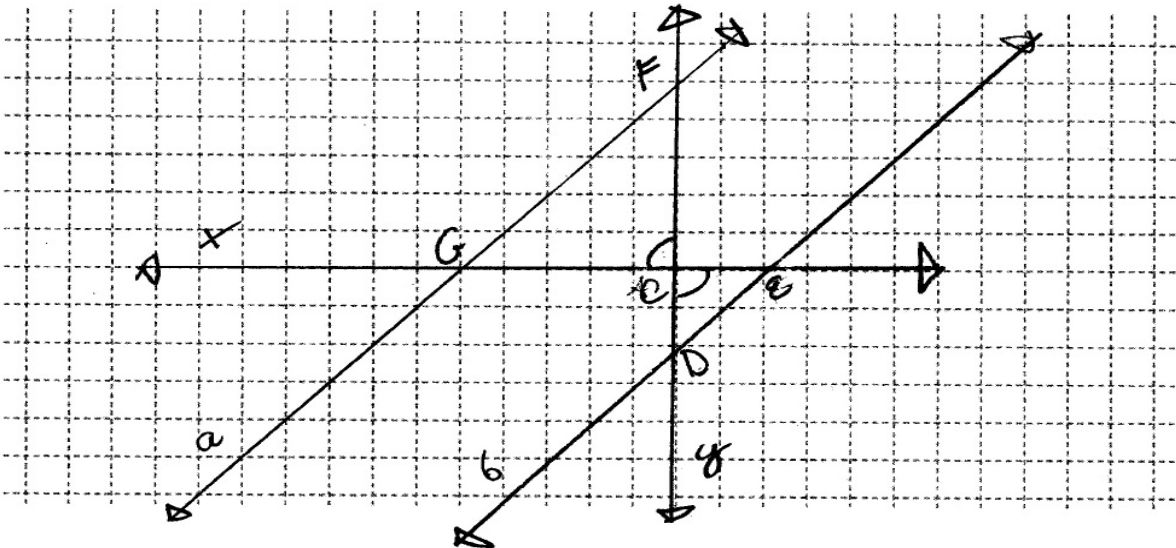


The slope of line a equals the slope of line b . Prove that line a is parallel to line b .

You may use the graphing grid to prepare any diagrams to accompany your proof.



Statement	Reason
1. Lines a & b are cut by transversal x & y .	1. given
2. slope of line a = slope of line b	2. given
3. $\angle FCG \cong \angle ECD$	3. def. of vert. \angle s
4. $\frac{FC}{CG} = \frac{CD}{CE}$	4. slope is = / slope formula
5. $\triangle FCG \sim \triangle DCE$	5. SAS post
6. $\angle EDC \cong \angle GFC$	6. Corr. \angle s of $\sim \Delta$ s are \cong
7. line a is \parallel to line b	7. Converse of alt. int. \angle s theorem