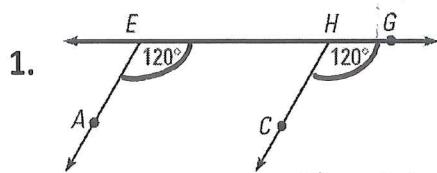


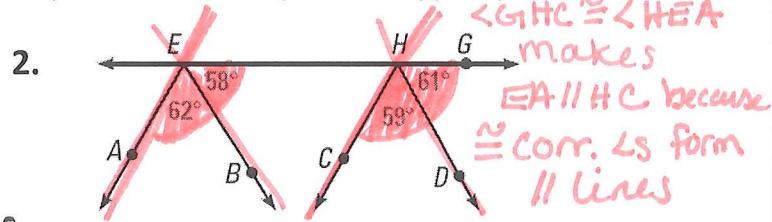
Name: Key

ACC Geometry: What Lines Are Parallel Worksheet

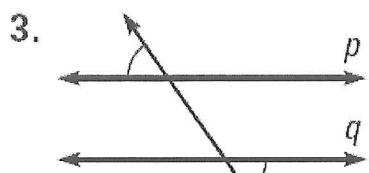
Directions: Given the information, determine which lines, if any are parallel. State how you know by justifying.



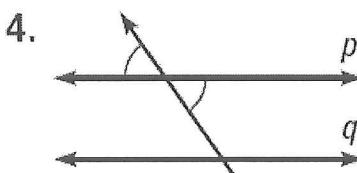
$\angle AEH \cong \angle CHG$ makes $EA \parallel HC$ because \cong corr. Ls form // lines.



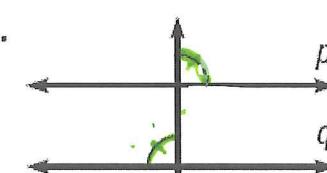
$\angle GHC \cong \angle HEA$ makes $EA \parallel HC$ because \cong corr. Ls form // lines



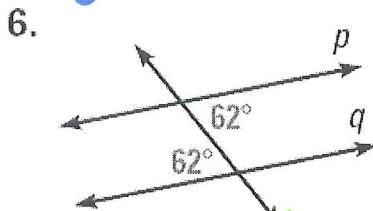
$p \parallel q$ because \cong alt. ext. angles form // lines



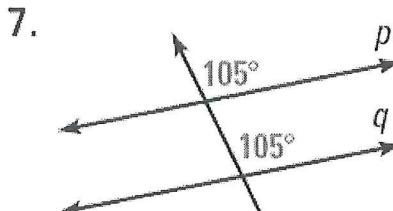
Not parallel



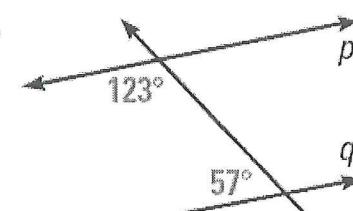
nope



$p \parallel q$ \cong alt int Ls form // lines



$p \parallel q$ \cong corr. Ls form // lines

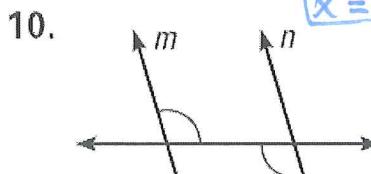
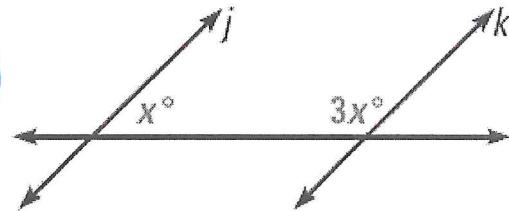


$p \parallel q$ Suppl. con. int Ls form // lines

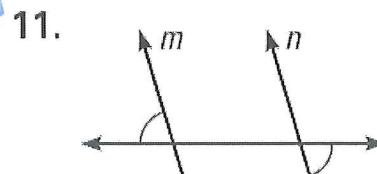
9. Find the value of x that makes $j \parallel k$. Which postulate or theorem about parallel lines supports your answer?

$$x + 3x = 180 \\ 4x = 180 \\ x = 45^\circ$$

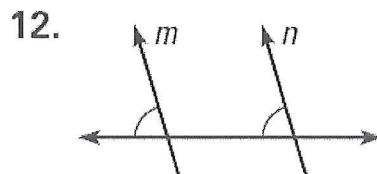
Suppl. con. int Ls form // lines



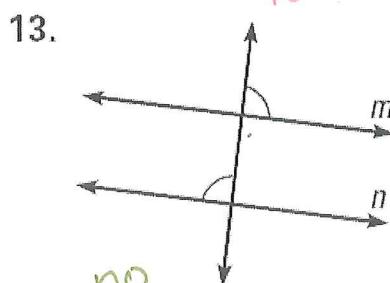
$m \parallel n$ \cong alt int Ls form // lines



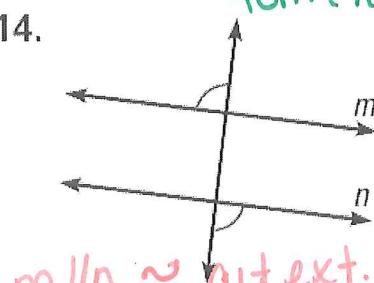
$m \parallel n$ \cong alt ext Ls form // lines



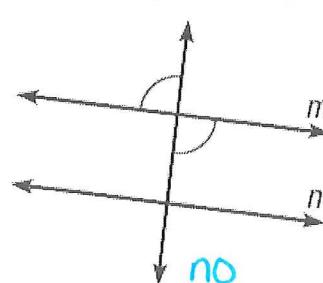
$m \parallel n$ \cong corr. Ls form // lines



no

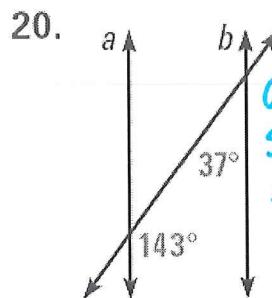


$m \parallel n$ \cong alt ext. Ls form // lines

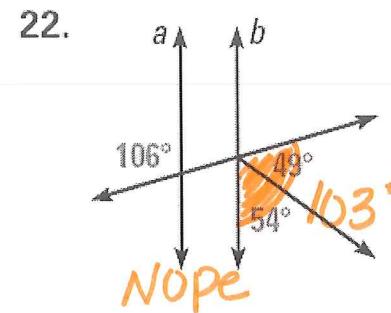
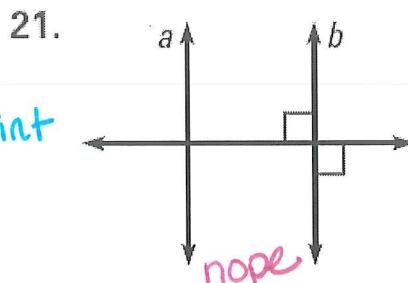


no

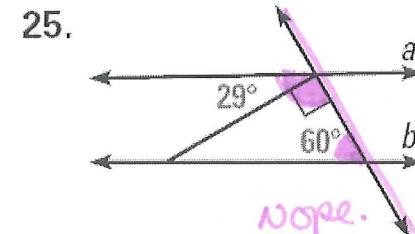
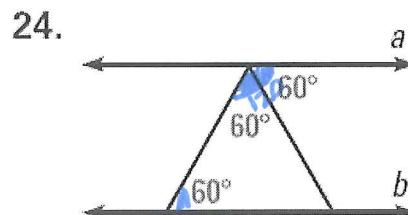
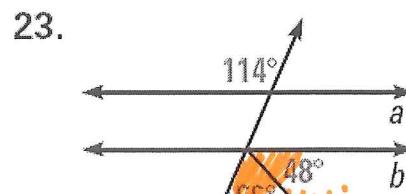
LOGICAL REASONING Is it possible to prove that lines a and b are parallel? If so, explain how.



all b
Suppl. con. int
Ls form
// lines.



NOPE

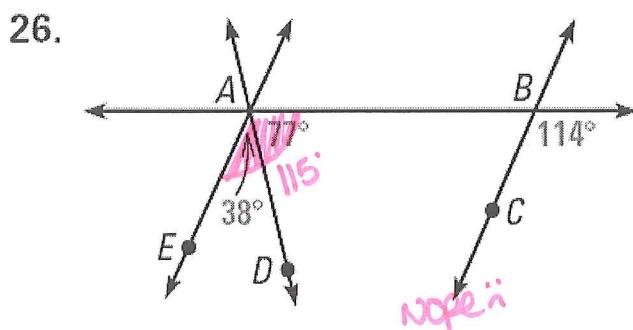


NOPE.

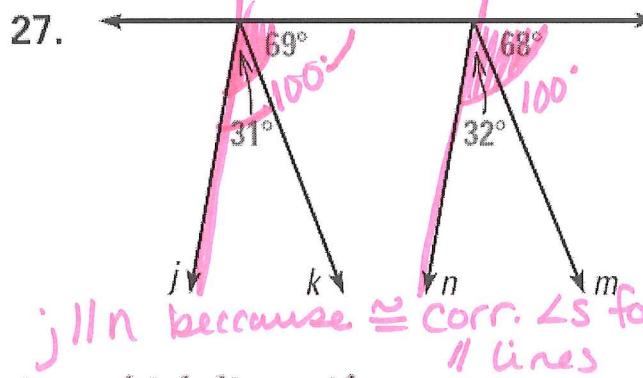
all b because \cong alt. ext. Ls form // lines



LOGICAL REASONING Which lines, if any, are parallel? Explain.



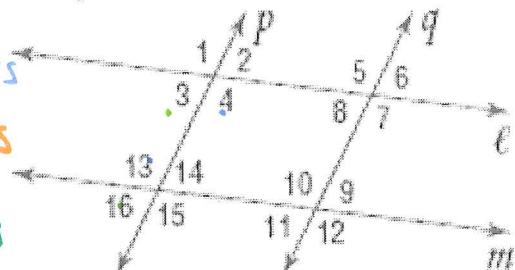
From textbook:



$j \parallel n$ because \cong corr. Ls form // lines

Given the following information, determine which lines, if any, are parallel. State the postulate or theorem that justifies your answer.

- $\angle 16 \cong \angle 3$ $p \parallel q$ \cong corr. Ls form // lines
- $\angle 4 \cong \angle 13$ $p \parallel q$ \cong alt. int. Ls form // lines
- $m\angle 14 + m\angle 10 = 180$ $p \parallel q$ Suppl. con. int Ls form // lines
- $\angle 1 \cong \angle 7$ $p \parallel q$ \cong alt. ext. Ls form // lines



Given the following information, determine which lines, if any, are parallel. State the postulate or theorem that justifies your answer.

- $\angle AEF \cong \angle BFG$ $AE \parallel BF$ \cong corr. Ls form // lines
- $\angle EAB \cong \angle DBC$ $AE \parallel BF$ \cong corr. Ls form // lines
- $\angle EFB \cong \angle CBF$ $EG \parallel AC$ \cong alt. int Ls form // lines
- $m\angle GFD + m\angle CBD = 180$ $EG \parallel AC$ Suppl. con. int Ls form // lines

