# 1. Find the value for x that makes a || b



3x + 20  a
x + 30
5x  b

---
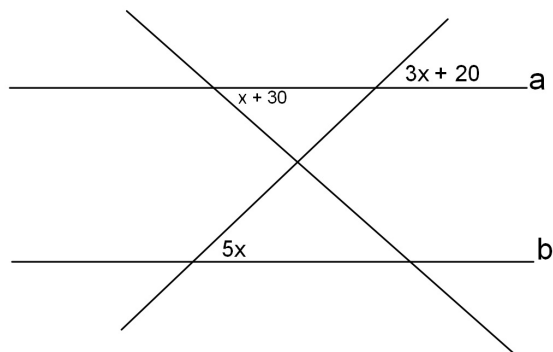
2.

Given:  a || b and  c || d

Prove:  ∠13 & ∠8 are supplementary



Start by planning it out

| Statement | Reason |
|-----------|--------|
| 1. a || b and  c || d | 1. Given |

---
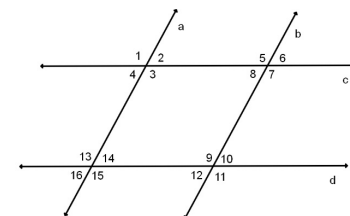
3. Write a proof.

Given:  c || d   & ∠1 ≅ ∠9

Prove:    a || b

Start by planning it out.
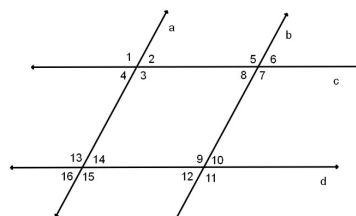


| Statement | Reason |
|-----------|--------|
| 1. c || d   & ∠1 ≅ ∠9 | 1. Given |

---

4.  Given:  a || b and ∠7 & ∠16 are supplementary

Prove:   c || d

Start by planning it out



| Statement | Reason |
|-----------|--------|
| 1.  a || b and ∠7 & ∠16 are supplementary | 1. Given |