NAME _____ DATE _____

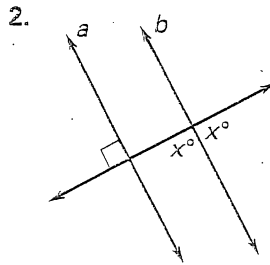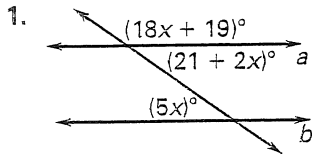## Practice C

For use with pages 157–164

Explain how you would show that $a \parallel b$.

1.

$(18x + 19)°$
$(21 + 2x)°$ a
$(5x)°$
b

2.

a b
$x°$ $x°$

3.

a b
$(2x)°$
$(2x)°$
$(180 - 2x)°$
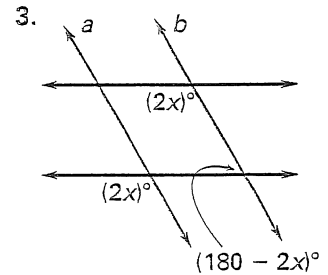
Determine which lines, if any, must be parallel. Explain your reasoning.

4.

ℓ
$113°$ $66°$
m
$67°$
n
p

5.

ℓ
m
p n
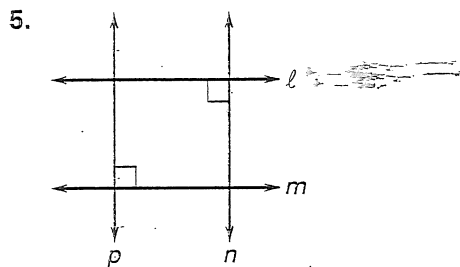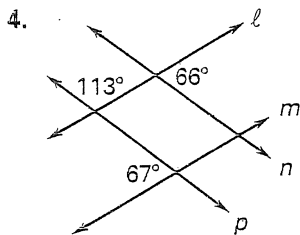
6. Draw an obtuse angle. Construct an angle congruent to it.

7. Draw a horizontal line. Construct a line parallel to it through a point not on the line.

8. **Proof:** Write a two-column proof of Theorem 3.12.
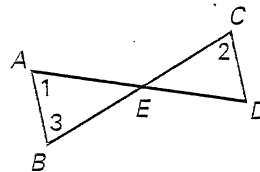
   Given: $m \perp \ell,\ n \perp \ell$

   Prove: $m \parallel n$

ℓ
m
n
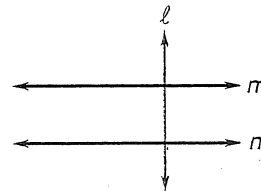
9. **Proof:** Write a two-column proof.

   Given: $\angle 1 \cong \angle 2,\ \angle 1 \cong \angle 3$

   Prove: $\overline{AB} \parallel \overline{CD}$

C
A
2
1
E
3 D
B

10. **Proof:** Write a two-column proof.

   Given: $\angle 1 \cong \angle 2,\ \angle 3 \cong \angle 4$

   Prove: $\ell \parallel m$

ℓ
1
2
n
3
4
m