NAME _____ DATE _____

Practice C
For use with pages 150–156
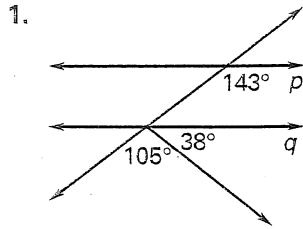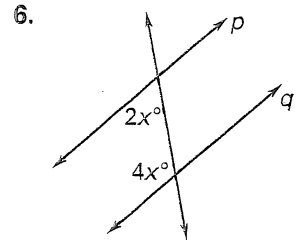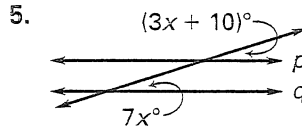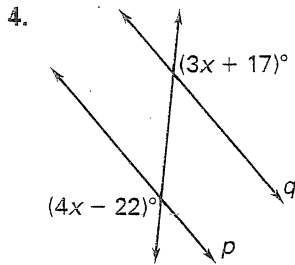
Is it possible to prove that lines *p* and *q* are parallel? If so, state the postulate or theorem you would use.
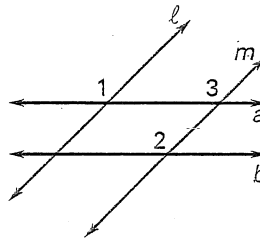
1.

143° *p*

38°
105° *q*

2.

37°
53°
p
q

3.

27° *p*
24°
128°
q
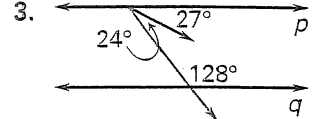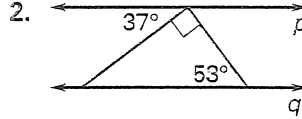
Find the value of x that makes *p* ∥ *q*.

4.

$(3x + 17)°$
q
$(4x - 22)°$
p

5.

$(3x + 10)°$
p
q
$7x°$

6.

p
$2x°$
$4x°$
q

7. Write a two-column proof.

Given: ℓ ∥ *m*, ∠1 ≅ ∠2

Prove: *a* ∥ *b*

ℓ
m
1   3
a
2
b

8. Write a two-column proof.

Given: ℓ ∥ *m*, ∠1 ≅ ∠2

Prove: *a* ∥ *b*

1   ℓ
3   *m*
2
a   *b*
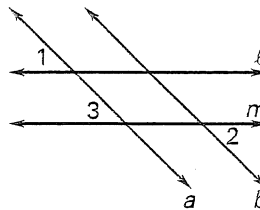
9. Write a flow proof.

Given: ℓ ∥ *m*, ∠1 and ∠2 are
supplementary

Prove: *a* ∥ *b*

ℓ
3 2
1   *m*
a   *b*