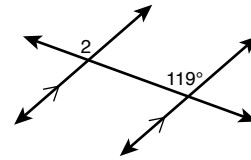
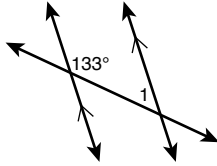




Practice B

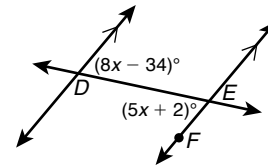
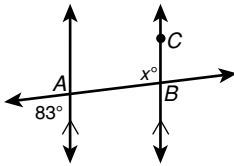
Angles Formed by Parallel Lines and Transversals

Find each angle measure.



1. $m\angle 1$ _____

2. $m\angle 2$ _____



3. $m\angle ABC$ _____

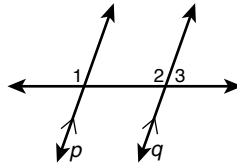
4. $m\angle DEF$ _____

Complete the two-column proof to show that same-side exterior angles are supplementary.

5. Given: $p \parallel q$

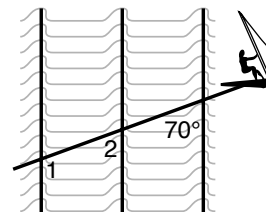
Prove: $m\angle 1 + m\angle 3 = 180^\circ$

Proof:



Statements	Reasons
1. $p \parallel q$	1. Given
2. a. _____	2. Lin. Pair Thm.
3. $\angle 1 \cong \angle 2$	3. b. _____
4. c. _____	4. Def. of $\cong \angle$ s
5. d. _____	5. e. _____

6. Ocean waves move in parallel lines toward the shore. The figure shows Sandy Beaches windsurfing across several waves. For this exercise, think of Sandy's wake as a line. $m\angle 1 = (2x + 2y)^\circ$ and $m\angle 2 = (2x + y)^\circ$. Find x and y .



$x =$ _____

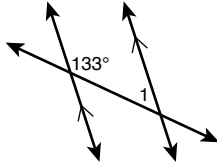
$y =$ _____



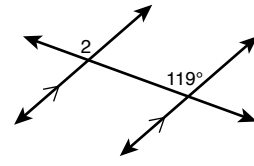
Practice B

Angles Formed by Parallel Lines and Transversals

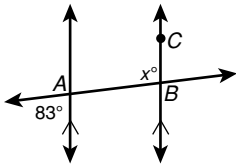
Find each angle measure.



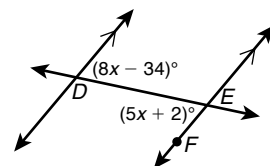
1. $m\angle 1$ **47°**



2. $m\angle 2$ **119°**



3. $m\angle ABC$ **97°**



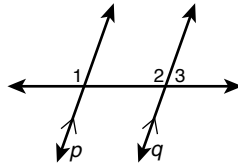
4. $m\angle DEF$ **62°**

Complete the two-column proof to show that same-side exterior angles are supplementary.

5. Given: $p \parallel q$

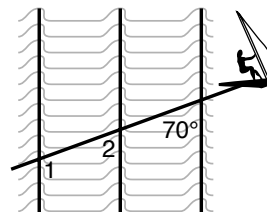
Prove: $m\angle 1 + m\angle 3 = 180^\circ$

Proof:



Statements	Reasons
1. $p \parallel q$	1. Given
2. a. <u>$m\angle 2 + m\angle 3 = 180^\circ$</u>	2. Lin. Pair Thm.
3. $\angle 1 \cong \angle 2$	3. b. <u>Corr. \sphericalangle Post.</u>
4. c. <u>$m\angle 1 = m\angle 2$</u>	4. Def. of $\cong \sphericalangle$
5. d. <u>$m\angle 1 + m\angle 3 = 180^\circ$</u>	5. e. <u>Subst.</u>

6. Ocean waves move in parallel lines toward the shore. The figure shows Sandy Beaches windsurfing across several waves. For this exercise, think of Sandy's wake as a line. $m\angle 1 = (2x + 2y)^\circ$ and $m\angle 2 = (2x + y)^\circ$. Find x and y .



$x =$ **15**

$y =$ **40**