$\qquad$ Date $\qquad$ Class $\qquad$

## LEsson Practice B

## 3-2 Angles Formed by Parallel Lines and Transversals

Find each angle measure.


1. $m \angle 1$ $\qquad$ 2. $\mathrm{m} \angle 2$ $\qquad$

2. $\mathrm{m} \angle A B C$ $\qquad$ 4. $\mathrm{m} \angle D E F$ $\qquad$

Complete the two-column proof to show that same-side exterior angles are supplementary.
5. Given: $p \| q$

Prove: $\mathrm{m} \angle 1+\mathrm{m} \angle 3=180^{\circ}$
Proof:


| Statements | Reasons |
| :--- | :--- |
| 1. $p \\| q$ | 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. $\mathrm{m} \angle 1=(2 x+2 y)^{\circ}$ and $\mathrm{m} \angle 2=(2 x+y)^{\circ}$.
Find $x$ and $y$.
$x=$ $\qquad$

$y=$ $\qquad$

