### 10.5A Similar and Congruent Polygons

Name $\qquad$

## Complete the statement.

1. If two polygons are similar, then their corresponding $\qquad$ are congruent.
2. If two polygons are congruent, then their corresponding $\qquad$ and $\qquad$ are congruent.

In Exercises 3-4, use the diagram and the fact that $\triangle A B C \sim \triangle X Y Z$.

3. Name the corresponding angles.
4. Name the corresponding sides.

In Exercises 5-8, use the diagram and the fact that $A B C D \cong E F G H$.

5. Name the corresponding angles.
7. Name the corresponding sides.
6. Find $m \angle A D C$.
8. Find $m \angle F G H$.

Tell whether the two polygons are similar (yes or no) and show a proportion to prove your answer.
9.

10.

11.

12.


