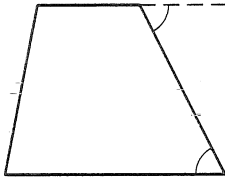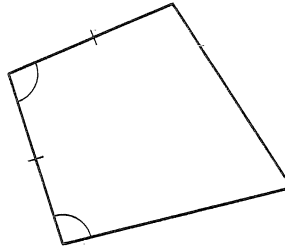NAME _____ DATE _____

Practice C
For use with pages 356–363

Decide whether the figure is a trapezoid. If it is, is it an isosceles trapezoid?
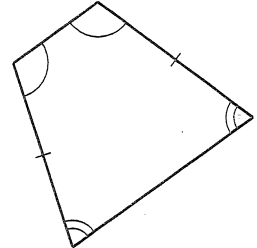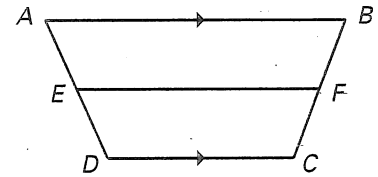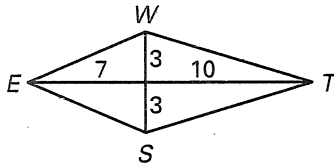
1.

2.

3.

Quadrilateral ABCD is a trapezoid with midsegment $\overline{EF}$. Use the given information to answer the following.

4. If $m\angle B = 73°$, then $m\angle C =$ ___?___ .

5. If $m\angle A = 51°$ and $m\angle C = 105°$, then $m\angle D =$ ___?___ .

6. If $m\angle A = 48°$ and $m\angle C = 112°$, then $m\angle CFE =$ ___?___ .

7. If $AB = 28$ and $DC = 13$, then $EF =$ ___?___ .

8. If $EF = 13$ and $DC = 6$, then $AB =$ ___?___ .

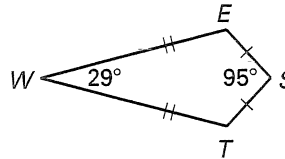9. If $EF = x + 5$ and $DC + AB = 4x + 6$, then $EF =$ ___?___ .

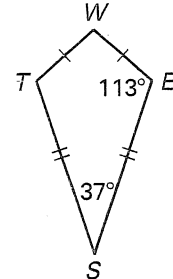**Find the length of the sides to the nearest hundredth, or the measure of the angles in kite WEST.**

10.

11.

12.

13. In an isosceles trapezoid, if one pair of base angles is twice the measure of the second pair of base angles, what are the measures of the angles?

14. If the midsegment of a trapezoid measures 6 units long, what is true about the lengths of the bases of the trapezoid?

Write a two-column or a paragraph proof.

15. Given: *LORI* is a rectangle.
    $\overline{LB} \cong \overline{DO}$

    Prove: *BIRD* is an isosceles trapezoid.
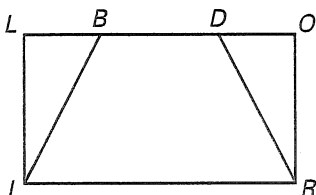
16. Given: $\overline{AF} \not\cong \overline{BC}$
    $\triangle ABC \cong \triangle CDA$

    Prove: *ABCF* is a trapezoid.