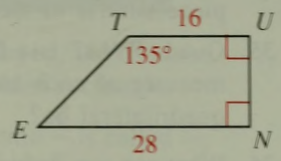
In Exercises 15-23 quad. *TUNE* ~ quad. *T'U'N'E'*.

15. What is the scale factor of quad. *TUNE* to quad. *T'U'N'E'*?

16. What special kind of quadrilateral must quad. *T'U'N'E'* be? Explain.



17. Find $m\angle T'$.

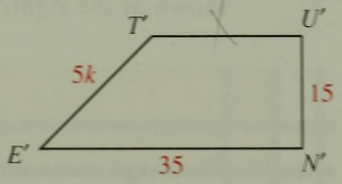
18. Find $m\angle E'$.

19. Find UN.

20. Find $T'U'$.

21. Find TE.

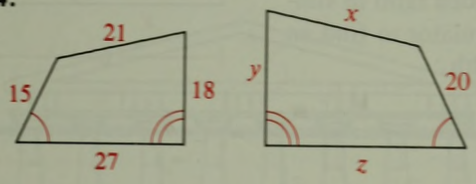
22. Find the ratio of the perimeters.



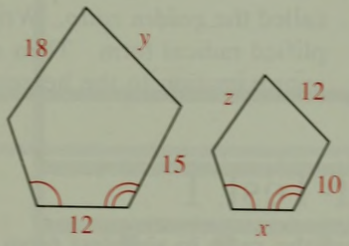
B **23.** What property of proportions on page 245 would you use to show that the ratio of the perimeters is equal to the ratio of the lengths of any two corresponding sides?

Two similar polygons are shown. Find the values of x, y, and z.

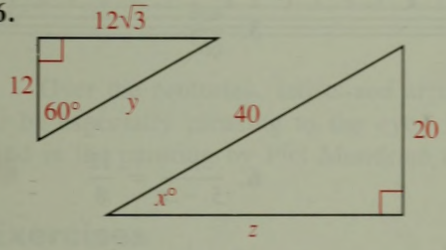
24.



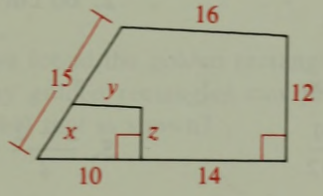
25.



26.



27.

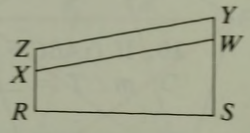


28. Draw two equilateral hexagons that are clearly not similar.

29. Draw two equiangular hexagons that are clearly not similar.

30. If $\triangle ABC \sim \triangle DEF$, express AB in terms of other lengths. (There are two possible answers.)

31. Explain how you can tell at once that quadrilateral $RSWX$ is not similar to quadrilateral $RSYZ$.



Plot the given points on graph paper. Draw quadrilateral *ABCD* and $\overline{A'B'}$. Locate points *C'* and *D'* so that *A'B'C'D'* is similar to *ABCD*.

32. $A(0, 0)$, $B(4, 0)$, $C(2, 4)$, $D(0, 2)$, $A'(-10, -2)$, $B'(-2, -2)$

33. $A(0, 0)$, $B(4, 0)$, $C(2, 4)$, $D(0, 2)$, $A'(7, 2)$, $B'(7, 0)$