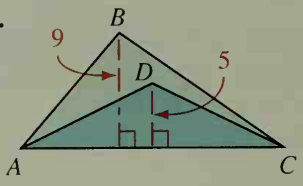
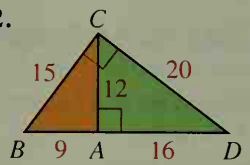
Classroom Exercises

Find the ratio of the areas of $\triangle ABC$ and $\triangle ADC$.

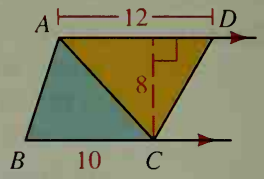
1.



2.



3.

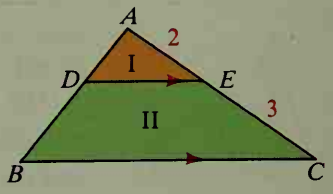


The table refers to similar figures. Complete the table.

	4.	5.	6.	7.	8.	9.	10.	11.
Scale factor	1:3	1:5	3:4	2:3	?	?	?	?
Ratio of perimeters	?	?	?	?	4:5	3:5	?	?
Ratio of areas	?	?	?	?	?	?	16:49	36:25

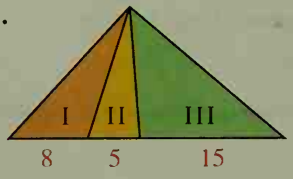
12. **a.** Are all circles similar?
b. If two circles have radii 9 and 12, what is the ratio of the circumferences? of the areas?

13. **a.** Are regions I and II similar?
b. Name two similar triangles.
c. What is the ratio of their areas?
d. What is the ratio of the areas of regions I and II?

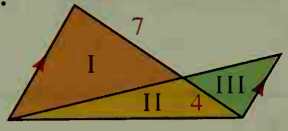


Find the ratio of the areas of triangles (a) I and II and (b) I and III.

14.



15.



Written Exercises

The table refers to similar figures. Copy and complete the table.

A

	1.	2.	3.	4.	5.	6.	7.	8.
Scale factor	1:4	3:2	r:2s	?	?	?	?	?
Ratio of perimeters	?	?	?	9:5	3:13	?	?	?
Ratio of areas	?	?	?	?	?	25:1	9:64	2:1

9. On a map of California, 1 cm corresponds to 50 km. Find the ratio of the map's area to the actual area of California.