

# EXERCISES

HW#6

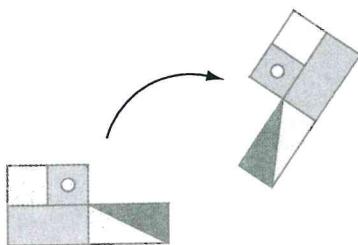
You will need



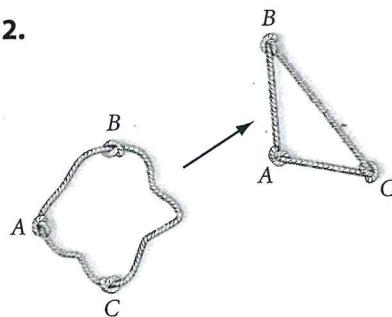
**Construction tools**  
for Exercises 9 and 10

- In Exercises 1–3, say whether the transformations are rigid or nonrigid. Explain how you know.

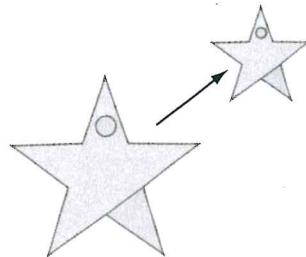
1.



2.

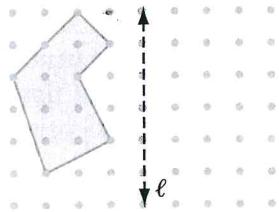


3.

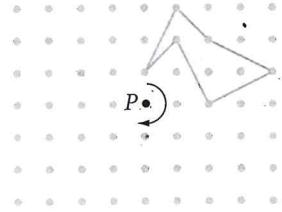


In Exercises 4–6, copy the figure onto graph or square dot paper and perform each transformation.

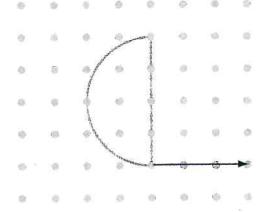
4. Reflect the figure over the line of reflection, line  $\ell$ .



5. Rotate the figure 180° about the center of rotation, point  $P$ .



6. Translate the figure by the translation vector.



**362** CHAPTER 7 Transformations and Tessellations

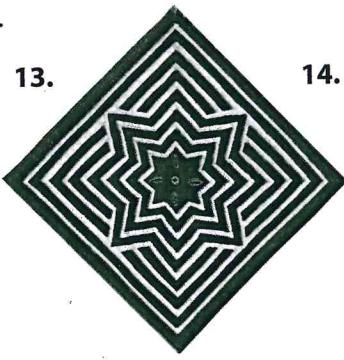
In Exercises 12–14, identify the type (or types) of symmetry in each design.

12.



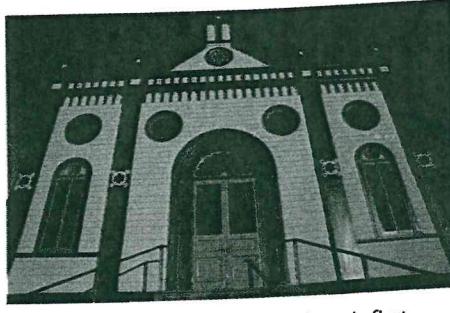
Butterfly

13.



Hmong textile, Laos

14.



The Temple Beth Israel, San Diego's first synagogue, built in 1889