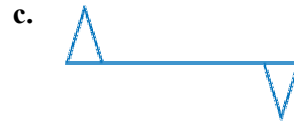
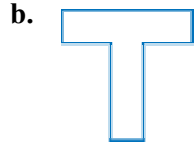


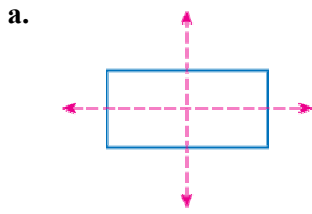
Lesson 7-4

**Example 1**

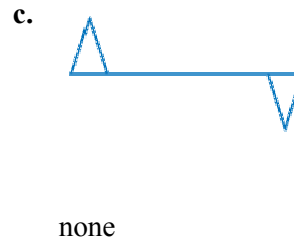
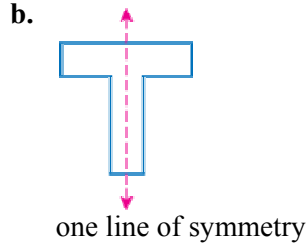
Trace each figure, and draw all its lines of symmetry. If a figure has no lines of symmetry, write *none*.



**Solution**

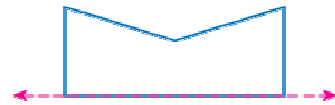


two lines of symmetry



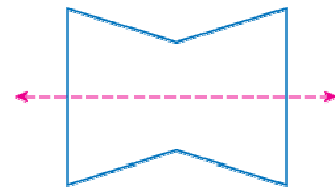
**Example 2**

Half of a figure and its line of symmetry are shown. Complete the figure by drawing the other half.



**Solution**

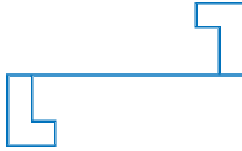
Draw a reflection of the figure across the line of symmetry. The completed figure is the same on each side of the line of symmetry.



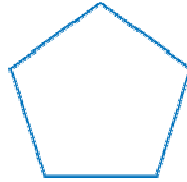
**Example 3**

Give the order of rotational symmetry for each figure.

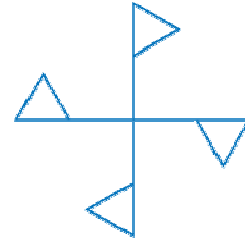
a.



b.



c.

**Solution**

a. The figure fits over its original position 2 times during a complete turn, so its order of rotational symmetry is 2.

b. The figure fits over its original position 5 times during a complete turn, so its order of rotational symmetry is 5.

c. The figure fits over its original position 4 times during a complete turn, so its order of rotational symmetry is 4.

**Example 4**

**RECREATION** Give the order of rotational symmetry for each item.

- a. a Ferris wheel with 20 baskets
- b. the wheel of a roller skate

**Solution**

- a. During a complete turn, the Ferris wheel will fit over its original position 20 times, so its order of rotational symmetry is 20.
- b. During a complete turn, the roller skate wheel will always look like its original position, so its order of rotational symmetry is infinite.