Problem 10.4. [24] There are 9 snakes coiled in closed loops under the carpet: 3 black, 3 striped, and 3 white (see Figure 10.17).
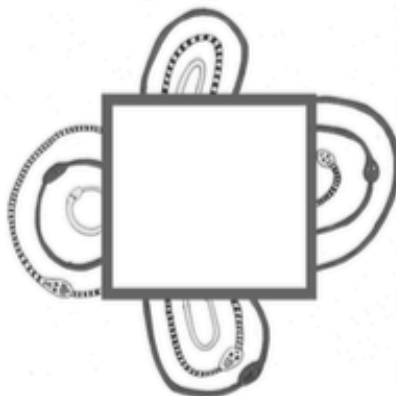

FIGURE 10.17.

The snakes do not touch each other, and they do not cross themselves. Each snake holds her own tail in her mouth (see Figure 10.18).

FIGURE 10.18.

(a) What is the color of the snake that is completely hidden under the carpet?

(b) How are the snakes coiled under the carpet? Copy the page with Figure 10.17 and draw on the carpet the hidden parts of the snakes.

Problem 1. These two snakes sleep holding their tails in their mouths. Is it possible to detangle them without waking them up, so that they would keep holding their tails in their mouths?