**The Tiles Problem**

The figure shows a sequence of figures containing small square tiles. Some of the tiles are shaded. Notice that the first figure has \_\_\_\_\_ shaded tile. The second has \_\_\_\_\_ shaded tiles. The third figure has \_\_\_\_\_ shaded tiles. Is there a pattern?

(a) How many shaded tiles are there in the nth figure?

(b) How many white tiles are there in the nth figure?

(c) How many total tiles are there in the nth figure?

Source: Billstein, R., Libeskind, S., & Lott. J. (2010). *A Problem Solving Approach to Mathematics for Elementary School Teachers* (10th edition). Boston, MA:
 Pearson/Addison Wesley.