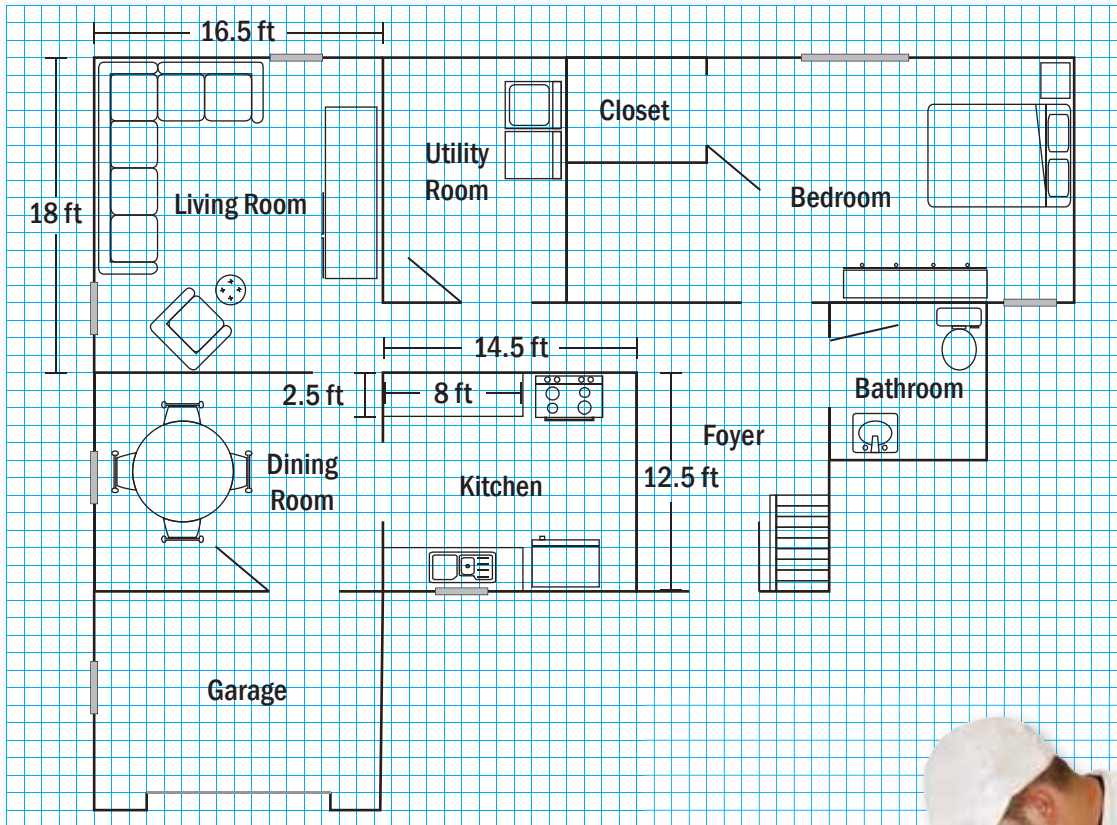**Significant Digits** In Exercises 13–16, rewrite each statement using the number of significant digits that seems appropriate in the context of the statement. Explain your reasoning. *(See Example 5.)*

13. In 2009, the population of Texas was 24,782,302 people.

14. The price of a house is $239,900.

15. The weight of a bag of sugar is 5.01 pounds.

16. The number of calories in a sandwich is 297.

Home Improvement In Exercises 17 and 18, use the floor plan. Write your answer with only as many significant digits as you think are reasonable. *(See Example 6.)*

17. You are carpeting the living room.

    a. How many square feet of carpet should you buy?

    b. The cost of the carpet including installation is $3.49 per square foot. How much does it cost to carpet the living room?

18. You are replacing the linoleum in the kitchen.

    a. How many square feet of linoleum should you buy? Should you include the area of the two counters in your estimate? Explain.

    b. The cost of the linoleum including installation is $1.25 per square foot. How much does it cost to replace the linoleum in the kitchen?