

Sample Program 1.1

Area Of A Room

Problem statement. Write an algorithm for calculating the area of a rectangular room, and speaking the answer. Include line numbers on each line.

Solution.

- 1 Write the label "length" on a new piece of paper.
- 2 Write the label "width" on the piece of paper.
- 3 Measure the length of a room in decimal feet, and write it under the label "length".
- 4 Measure the width of a room in decimal feet, and write it under the label "width".
- 5 On a calculator, type the number under the label "length".
- 6 On the calculator, press the TIMES key.
- 7 On the calculator, type the number under the label "width".
- 8 On the calculator, press the EQUALS key.
- 9 Write the label "area" on the piece of paper.
- 10 Write the contents of the calculator's display under the label "area".
- 11 Say out loud "The area of a room ".
- 12 Say the number under the label "length".
- 13 Say " feet long and ".
- 14 Say the number under the label "width".
- 13 Say " feet wide is ".
- 14 Say the number under the label "area".
- 15 Say " square feet."