Student: _____	**Instructor:** Fouad Khoury
Date: _____	**Course:** Math-1314

Assignment: Quiz 1.8

1. In the right triangle, find the length of the side not given.

$a = 2,\ c = \sqrt{n}$

$b = \sqrt{\rule{3cm}{0pt}}$
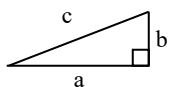
2. A stereo receiver is in a corner of a 19-ft by 11-ft room. Speaker wire will run under a rug, diagonally, to a speaker in the far corner. If 3 feet of slack is required on each end, how long a piece of wire should be purchased?

The wire should be _____ feet long.
(Round to the nearest foot.)

3. Plumbers use the Pythagorean theorem to calculate pipe length. If a pipe is to be offset, as shown in the figure, the travel, or length, of the pipe, is calculated using the lengths of the advance and the offset. Find the travel if the offset is 19.75 in. and the advance is 10.25 in.
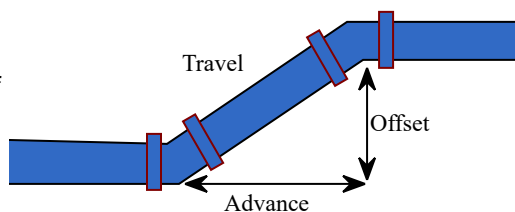
The length of the travel is about _____ in.
(Simplify your answer. Round to nearest thousandth as needed.)