

Correct. The values of a and b are not known, but they're equal, so the Pythagorean Theorem says that $c^2 = a^2 + b^2 = a^2 + a^2 = 2a^2$. Since $c = 12$, $2a^2 = 12^2 = 144$, so $a^2 = 72$, and therefore $a = \sqrt{72}$. Since $\sqrt{72}$ is approximately 8.4853, round the answer to 8.49 feet.