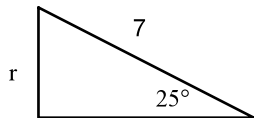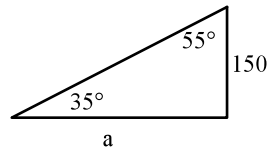# Right Triangle Application Example Problems (1.3 part 2)

Given the figures below, solve for the variable exactly. Then use your calculator to get an
approximation

(a) r = _____ ≈ _____

(b) a = _____ ≈ _____

A contractor wants to measure the height of a building. He walks 50 feet from the building and
measures the angle of elevation to the top of the building as 37 °. Find the exact height of the
building and the approximate height, correct to one decimal place.

A helicopter hovers 400 feet above a river. The angle of depression from the helicopter to the west
bank is 73°, while the angle of depression from the helicopter to the east bank is 44°.   Find
the width of the river (exact and approximate.)