

Mission: Disaster Relief

A major fire at a high rise tower has trapped several people in the upper section of the building. The rescue team can not get to them by going up, so they decide to do a rope rescue by rappelling down from the roof. The details you know for this rescue mission are that from a point 30 metres from the base of the tower, the angle of elevation to the floor where the people are trapped is 25° , and the angle of elevation to the top of the building is 40° .



- It's your job to calculate the distance, to the nearest hundredth of a metre, that the rappelling team must drop to make a successful rescue.