

Adding 4 sensors in each corner

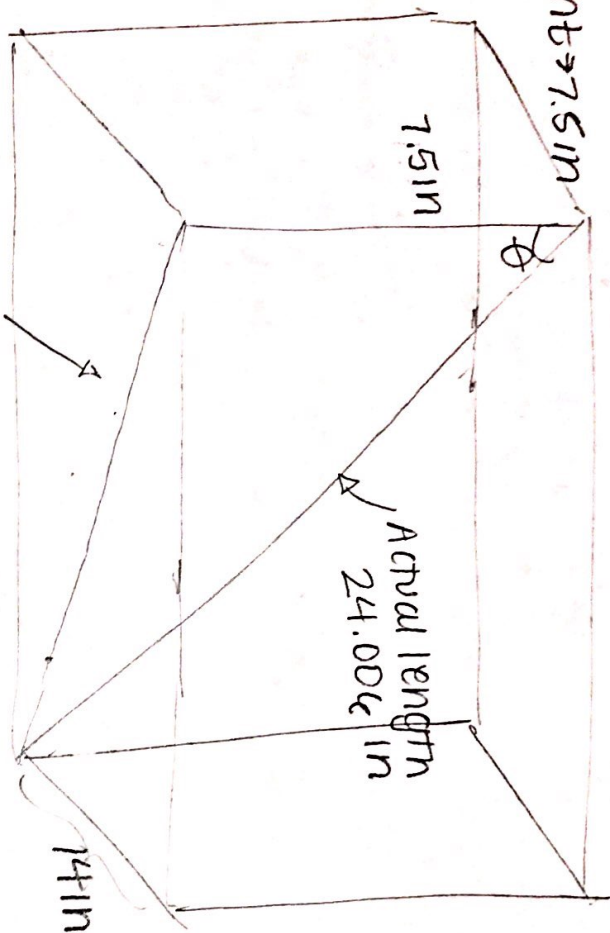
Door $\Rightarrow 3m$

Area $\Rightarrow 18m \times 14m$

ceiling height $\Rightarrow 7.5m$

$$\tan \theta = \frac{x}{y}$$

$$7.5 \tan \theta = y$$

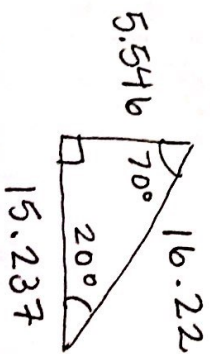
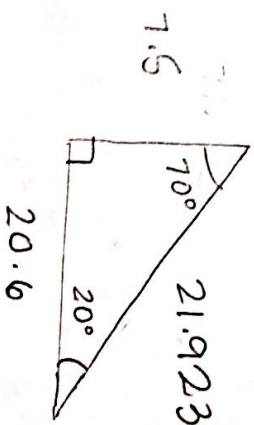


Actual length = 22.804m

18m

Avg human height $\rightarrow 5.546$ inches
(in our scale 1:12)

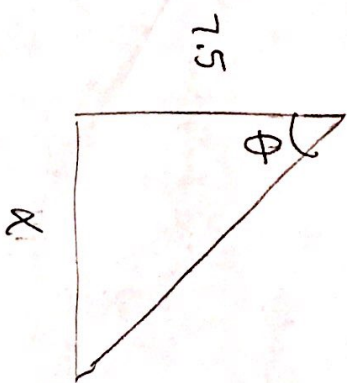
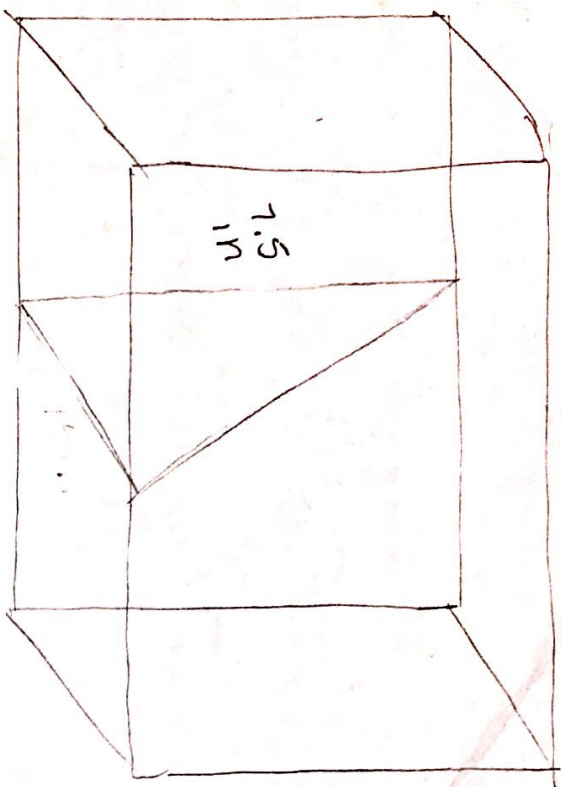
θ	x (inch)
10°	1.322
20°	2.73
30°	4.33
40°	6.29
50°	8.94
60°	12.99
70°	20.6 approx.
80°	42.53



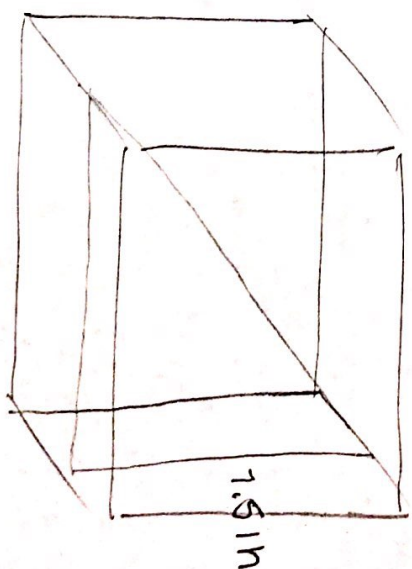
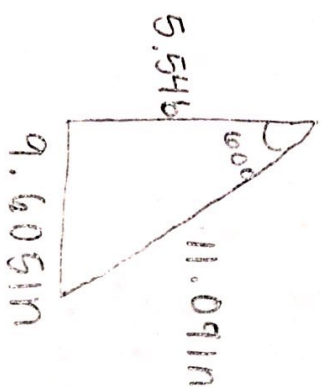
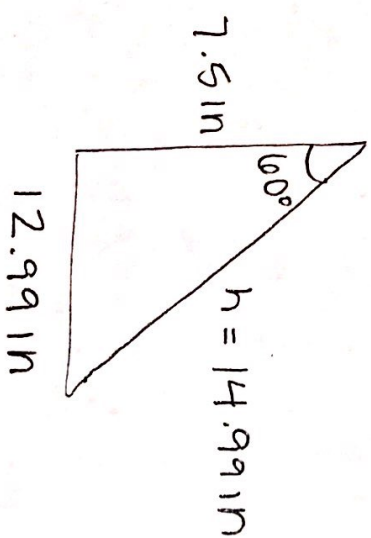
$$\tan\left(\frac{x}{y}\right)$$



Adding 4 sensors in the middle of each wall on the ceiling



θ	x
10°	1.322
20°	2.73
30°	4.33
40°	6.29
\vdots	
60°	12.99



θ	x
60°	12.99
70°	20.6

} somewhere in here

