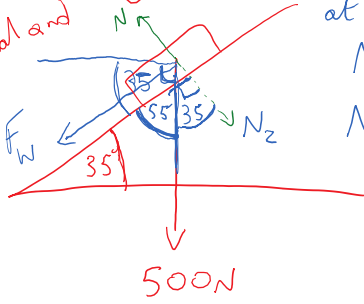


Rest = not moving so all
forces are equal and
opposite.



Since the body is
at rest
 $N = N_2$

$$N_2 = 500 \cos 35 = 409.6 \text{ N}$$

$$F_w = 500 \cos 55$$

$$= 286.8 \text{ N}$$

$$x^2 = 3^2 + 7^2 = 9 + 49$$

$$x^2 = 58$$

$$x = \sqrt{58} = 7.62$$