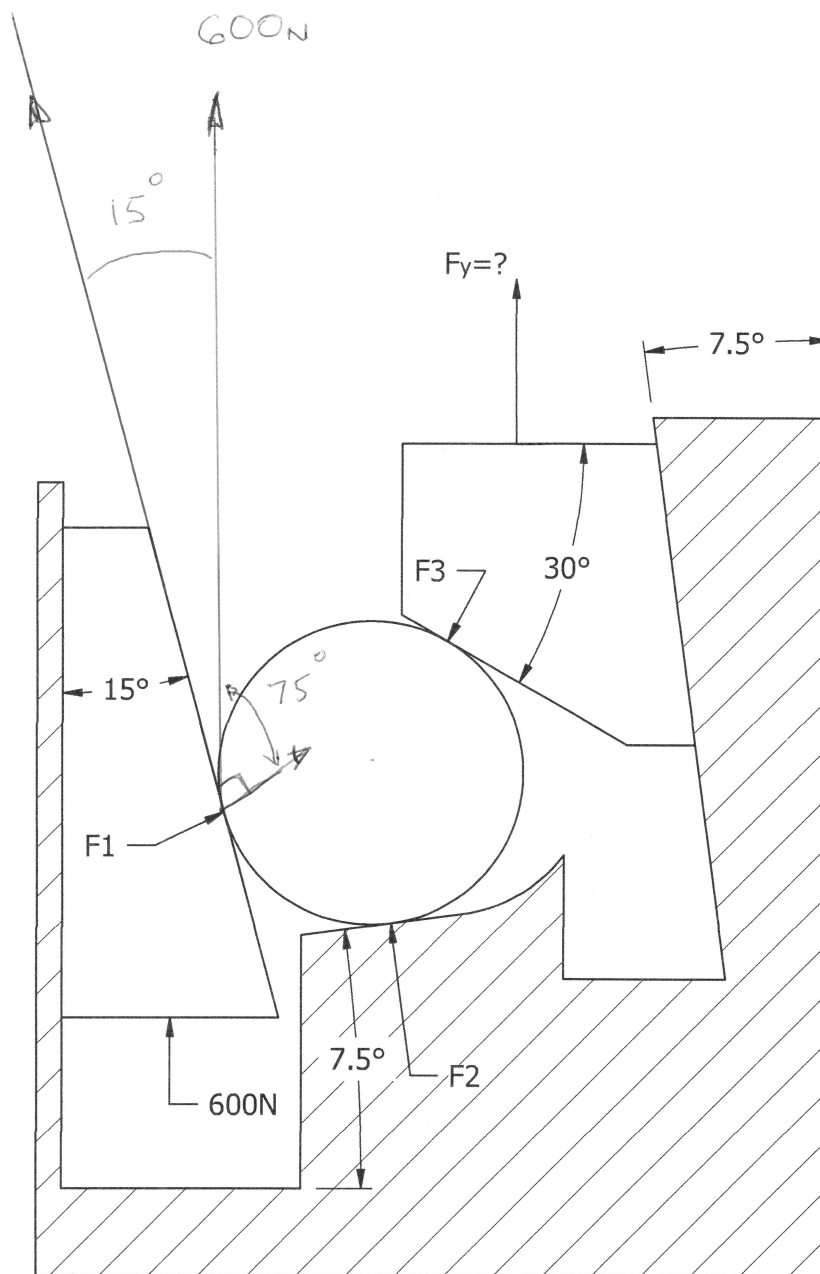


579.55N



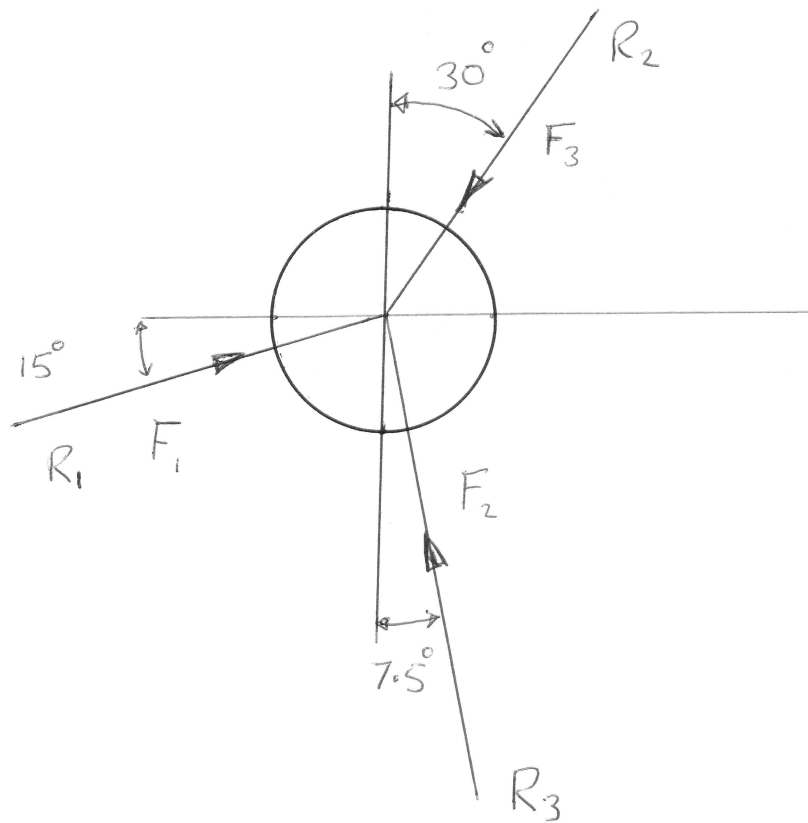
IGNORING FRICTION RESOLVE 600N VERTICAL FORCE PARALLEL & RIGHT ANGLES TO 15° WEDGE

$$600 \times \cos 75^\circ = 155.291 \text{ N} \approx 155.3 \text{ N}$$

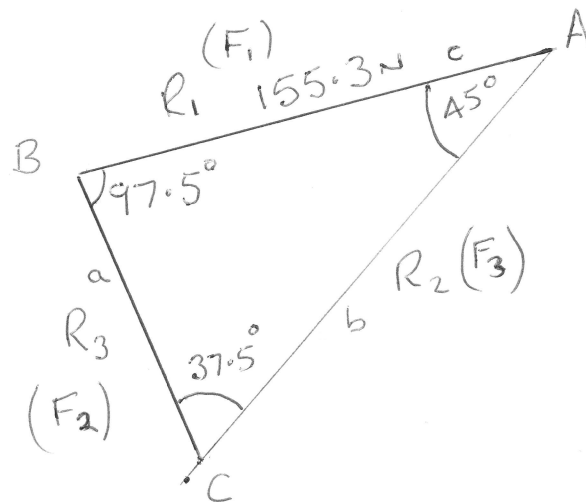
$$600 \times \cos 15^\circ = 579.55 \approx 579.6 \text{ N}$$

2.

ASSUMING ALL REACTIONS ALL MEET AT THE CENTRE OF BALL



TRIANGLE OF FORCES.



$$\therefore \frac{b}{\sin 97.5^\circ} = \frac{c}{\sin 37.5^\circ}$$

$$\therefore b = \frac{c \times \sin 97.5^\circ}{\sin 37.5^\circ} = \underline{\underline{252.92 \text{ N}}} \quad (F_3)$$

3.

So THE VERTICAL COMPONENT OF THE
RESULTANT F_3 :-

$$252.92\text{N} \times \cos 30^\circ = 219.04\text{N}.$$