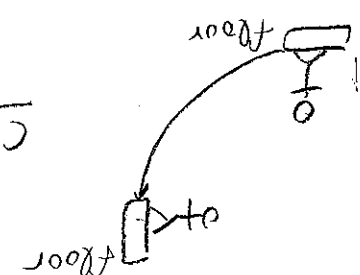


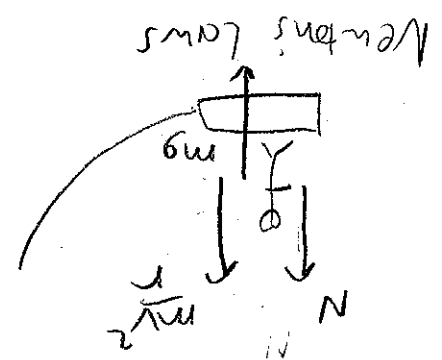
1)

positive g-forces

climb



force diagram



Newton's laws

$$N - mg = \frac{mv^2}{r}$$

thus

$$N = mg + \frac{mv^2}{r}$$

true weight gives the sensation of added weight

how do I make

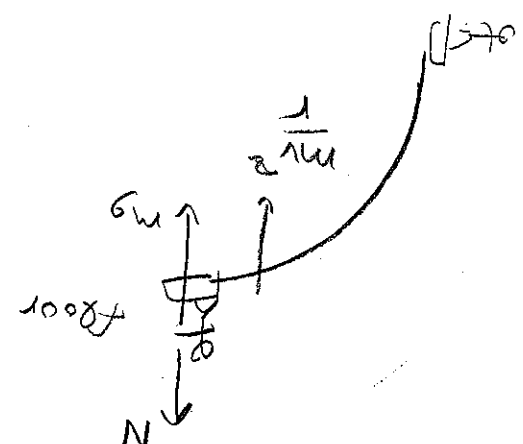
$$\frac{mv^2}{r} - mg = N$$

look like

$$N = mg + \frac{mv^2}{r}$$

2) Negative g-forces

dive



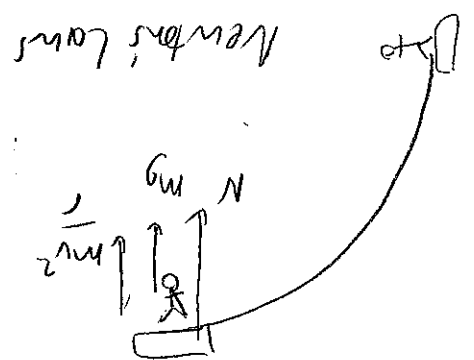
Newton's laws

$$N - mg = -\frac{mv^2}{r}$$

$$N = mg - \frac{mv^2}{r}$$

deducts from weight

Negative g's to positive g's if I roll the plane over



Newton's laws

$$-N - mg = -\frac{mv^2}{r}$$

$$\frac{mv^2}{r} - mg = N$$

Still seems to give apparent weightlessness