

Accident-prone

You need: a calculator

ACTIVITY

The following table shows the first 2 000 accident claims in a particular year and the sports in which the accidents happened.

1. a. Use the table below to estimate the number of people injured in each sport. Use a calculator to check your estimates. The first sport has been done for you.

	Sport in which accident happened	Decimal fraction of total accident claims	Number of people
i.	Athletics	0.0375	75
ii.	Gymnastics	0.01	
iii.	Hockey	0.05	
iv.	Netball	0.039	
v.	Rugby league	0.152	
vi.	Rugby	0.205	
vii.	Skateboarding	0.06	
viii.	Soccer	0.0815	
ix.	Surfing	0.0185	
x.	Tennis	0.028	
xi.	Triathlon	0.008	
xii.	Other sports		

	Number of People
i.	Estimated
ii.	70–80
iii.	Actual
iv.	75

- b. What should the decimal fraction and the number of people in the category “other sports” be?
2. Altogether, there were 4 736 sports accidents reported that year.
- a. If 0.0625 of them were from skateboarding, how many skateboarding accidents were there?
- b. If 0.03125 of them were from netball, how many netball accidents were there?
3. ACC charges self-employed people a non-work premium to cover treatment for non-work injuries. That year, the rate was \$1.0756 per \$100 of liable earnings.

Whitu’s father is a self-employed building contractor. If he had \$36,518 of liable earnings, how much non-work premium would he need to pay ACC?

