



The Maths of shearing sheep

It is shearing time in the year 1840 and Mr Squatter employs four shearers and two shed hands. It takes two days to finish shearing all the sheep using blade shears in a hot and dusty wood slab shed.

Mr Squatter agrees to pay each shearer 10 shillings (\$1) for every 100 sheep shorn, and the shed hands 5 shilling (50c) a day each.

1. How many sheep does Mr Squatter own? (see Tally sheet)

2. How much does it cost Mr Squatter to have them shorn?
(Use Tally sheet to help with your calculations)

3. Which shearer was the **Ringer** and how many sheep did he shear in two days?
(The Ringer is the fastest shearer)

4. Did he earn more or less than a shed hand?

5. If Mr Squatter sold his wool for 50 cents (5 shillings) a kilogram (but measured in ounces in 1840) and each sheep produced one kilogram of wool, how much profit did he make after paying for shearing?

6. In 2004, coarse wool sold for \$5.00 per kilogram and up to \$75,000 a kilogram for ultrafine wool. If a typical sheep produces four kilograms of wool and shearing costs are \$3 per sheep. How much profit could a farmer make after paying for the shearing for coarse wool? ...and for ultrafine wool?

Tally Sheet

Day 1

	Shearer A	Shearer B	Shearer C	Shearer D	Hand X	Hand Y
Sheep shorn	150	100	50	110	–	–
Wages	\$	\$	\$	\$	\$	\$

Day 2

	Shearer A	Shearer B	Shearer C	Shearer D	Hand X	Hand Y
Sheep shorn	160	130	40	90	–	–
Wages	\$	\$	\$	\$	\$	\$

Totals

	Shearer A	Shearer B	Shearer C	Shearer D	Hand X	Hand Y
	\$	\$	\$	\$	\$	\$