

WOOL MATH: EXAMPLE 1

Suzie Shepherd buys a 10 lb. raw fleece from Nellie and sends it to the wool mill to be washed and turned into yarn. The mill charges \$6.00 per pound for this service, *based on the raw fleece weight*. Nellie tells her that the fleece from her sheep usually shrinks 50%.

How much does Suzie pay the woolen mill?

$$\$6.00 \text{ per pound} \times 10 \text{ lb.} = \$60.00$$

How much yarn will she receive?

$$50\% \text{ of } 10 \text{ lbs} = 5 \text{ lbs of yarn}$$

What is her true cost per pound of roving?

$$\$60.00 \text{ divided by } 5 \text{ lbs.yarn} = \$12.00 / \text{lb}$$

If Suzie plans to sell that yarn in her knitting shop, she should sell it for at least \$12.00 per pound.

If Suzie plans to knit something with the yarn, she should choose a project that take 5 lbs.of yarn or less.

WOOL MATH: EXAMPLE 2

"I'm going to make lots of money with my sheep," says Cathy. "She is so big, she gives me 15 pounds of wool. The woolen mill only charges \$5.00 per pound to wash the fleece and turn it into yarn. I'll sell the yarn for \$10.00 a pound and make $5 \times \$15 = \$75!!!$ "

What's wrong with Cathy's plan?

Hint: the wool on her sheep usually shrinks 40% in processing...

1. What will the woolen mill charge her to process

15 lbs of raw wool @ \$5.00 per pound?

2. How much finished yarn will she get back?

(40% of 15 lbs)

3. What is her true cost per pound of yarn?

4. How much money would she receive by selling that yarn for \$10 per pound?

5. How much profit would she make?

Is this as much as she expected?

Answer key

1. Mill charges \$75

2. 15 lbs of wool yields 9 lb. Yarn

3. \$75 divided by 9 = \$8.33

4. \$10 per pound x 9 lbs = \$90 income

5. \$90 income minus \$75 paid to woolen mill = \$15.00 profit

Not even close to the \$75 she expected!