Weight & Cost in the Imperial System

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9:50 AM

- using comparisons of weight to calculate unit price

* 1st change all units to the SAME unit.

ex. #1

A 12 oz can of vegitables costs $1.49
A 1 lb 2 oz can costs $2.19
Which is the better buy?

CAN 1

$\frac{\$1.49}{12\text{oz}} = \$0.1242$ per oz

CAN 2

1 lb 2 oz
→ 16oz + 2oz = 18oz

$= \frac{\$2.19}{18\text{oz}} = \$0.1217$ per oz.

lower price!

Ex. #2

Victor bought steaks for dinner that weighed 4 lb 6 oz. It costs $2.74 per lb. He trimmed the fat and had only 4 lb of meat remaining. What is the true cost per pound?

$\frac{\text{lb}}{\text{oz}} \Rightarrow \frac{1\text{ lb}}{16\text{oz}} = \frac{x}{6}$

TOTAL MASS: 4 lb + 0.375 lb

$\frac{}{oz} \Rightarrow \frac{1\text{lb}}{16oz} \times \frac{x}{6}$

$\frac{6}{16} = \frac{16x}{16}$

$0.375 = x$

MASS

$= 4.375\ lb$

$\times \$2.74$

$\$11.99 \div 4\ lb$

$= \boxed{\$3.00/lb}$