



Roots of Reason
rootsofreason.org

how much for one?

The Constant of Proportionality

Apples cost \$2.50 per pound. Find $k = 2.50$ in all five representations.

1 Words

Apples cost
\$2.50
for every **1 pound**.

"For every 1" gives k directly.

2 Table

lb	2	4	6
\$	5	10	15
$\$ \div \text{lb}$	2.50	2.50	2.50

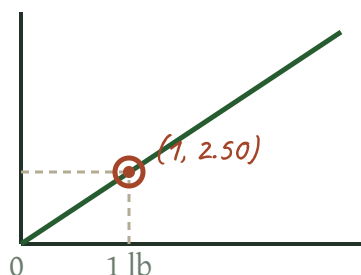
No row shows 1 pound. $k = \$ \div \text{lb}$
on any row.

3 Equation

$$y = \textcircled{2.50} x$$

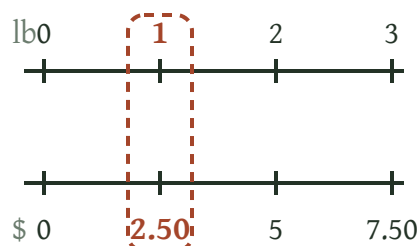
k is the number multiplying x .
Nothing is added.

4 Graph



k is the y -value at $x = 1$.

5 Diagram



The value paired with 1 is k .

*k is the amount
per one.*

Once you know k , multiply by
 x to find any y .