

6.1 Key Concepts 2 Constant of Variation Worked Example

Example: Marcel bought 25 chocolate bars, to be used as prizes in a contest, for a total of \$12.50. Find the constant of variation. Assume that buying chocolate bars is a direct variation.

Solution: The constant of variation is the ratio between price and number of bars.

$$\begin{aligned}k &= \frac{12.50}{25} \\ &= 0.50 \text{ \$/bar}\end{aligned}$$

Practice:

1. A businessman rented a car for 7 days and paid \$595.00. Find the constant of variation, assuming a direct variation.

2. Alexandra paid \$200 for a life insurance policy of \$150 000. Assuming a direct variation, find the constant of variation for the purchase of life insurance.

Answers: 1. \$85.00/day. 2. \$750/\$.