



Reasonableness and Estimation

People use estimation every day when they don't need an exact answer.

Examples

A) When you are shopping with only \$20.00 in your pocket, you need to estimate how much money you will spend as you put each item in your shopping basket.

B) In the morning as you reach for the snooze button on your alarm clock, you need to estimate how much time it will take you to get ready and travel to school so you are not late.

Estimation can also help us judge the reasonableness of something.

Examples

A) Look at the headline below. Think about how realistic or reasonable it is. Is there any reason you think it may not be true?

*Boy Finds 1 000 000 Dollar
Coins in a Suitcase*

If you estimate the amount of space needed to hold 1 000 000 dollar coins, you can figure out that it's not very reasonable that all that money would fit in a suitcase.

B) Stuart worked after school for one week. His daily hours and earnings are on the chart below.

Day	Hours Worked	Amount Earned
1	4	\$24.00
2	2	\$12.00
3	3.5	\$21.00
4	1	\$6.00
5	5	\$30.00

Stuart calculated his earnings and was happy when he got a sum of \$363.00.

However, he checked for reasonableness and realized that he must have made an error in his calculations. In the past, his pay cheques for a week's work have never been over \$100.00.

He looked back at the number of hours worked and estimated that he worked about 15 hours. At \$6.00 an hour, he should receive about \$90.00.

Stuart rechecked his first calculations. He had placed a decimal in the wrong place: \$30.00 had become \$300.00.

He recalculated and got a sum of \$93.00. Although Stuart would have been happy with the extra money, he was also happy that he rechecked because he may have spent money that he did not have.