

Learn to Guess and Check

Example

In a car park, there were 60 2-wheeled motorcycles, 4-wheeled cars and 6-wheeled trucks.

Given that there were 15 trucks and a total of 250 wheels altogether, how many motorcycles were there in the car park?



Think

- 1 Data given: 60 2-wheeled motorcycles, 4-wheeled cars, 6-wheeled trucks.
- 2 Create a guess and check table.
- 3 Make at least 3 guesses to find the answer.



Solve

Motorcycles	Wheels	Cars	Wheels	Trucks	Wheels	Total	Check
20	40	25	100	15	90	230	×
15	30	30	120	15	90	240	×
10	20	35	140	15	90	250	✓



Answer

There were **10 motorcycles** in the car park.

- 1 There were 50 questions in a quiz.
5 marks were awarded for every correct answer and 3 marks were deducted for every wrong answer.
If Peter answered all the questions in the quiz and scored 98 marks, how many questions did he answer correctly?

- 2 Alan has 13 pieces of \$2, \$5 and \$10 notes in his wallet.
If the amount of money he has is \$67, how many pieces of each type of notes does Alan have in his wallet?

Alan has 6 pieces of \$2 notes, 3 pieces of \$5 notes and 4 pieces of \$10 notes in his wallet.

\$2	Value	\$5	Value	\$10	Value	Total Value	Check
6	\$12	3	\$15	4	\$40	\$67	✓
7	\$14	2	\$10	4	\$40	\$64	×
6	\$12	4	\$20	3	\$30	\$62	×

2

He answered 31 questions correctly.

Correct	Marks (+)	Wrong	Marks (-)	Total	Check
25	125	25	75	50	×
30	150	20	60	90	×
31	155	19	57	98	✓

1

Answers: