

Name: _____

PS

Skill Set 10: Guess and Check

Guess and Check involves making calculated guesses and deriving a solution from them. It is a popular heuristic skill that is often used for upper primary mathematical problems. Because the guesses at the solutions can be checked immediately, the answers are always correct.

Example:

Danny has 30 5¢ and 10¢ stamps. The total value of the stamps is \$2.40. How many 5¢ stamps does Danny have?



Think

- Data given: 30 stamps → 5¢, 10¢; total value → \$2.40.
- Create a guess-and-check table.
- Make at least three guesses to find the answer.



Solve

5¢ Stamps	Value	10¢ Stamps	Value	Total Value	Check
15	\$0.75	15	\$1.50	\$2.25	x
14	\$0.70	16	\$1.60	\$2.30	x
12	\$0.60	18	\$1.80	\$2.40	✓

★ **Answer** Danny has **12 5¢ stamps**.

Give it a try!

Hector has 40 20¢ and 50¢ stamps. The total value of the stamps is \$13.70. How many 50¢ stamps does Hector have?



Think

Make at least three guesses to find the answer.



Solve

20¢ Stamps	Value	50¢ Stamps	Value	Total Value	Check

★ **Answer** Hector has _____ **50¢ stamps**.

(Answer: 19)

Practice: Guess and Check

1. On a particular day, a theater sold a total of 40 adult and child movie tickets. Each adult ticket cost \$9, and each child ticket cost \$6. If the total value of the tickets sold that day was \$294, how many child movie tickets were sold?



Think



Solve



Answer

2. A parking lot had 60 vehicles including 2-wheeled motorcycles, 4-wheeled cars, and 6-wheeled trucks. Of those vehicles, 15 were trucks. The vehicles had a total of 250 wheels altogether. How many motorcycles were in the parking lot?



Think



Solve



Answer