

Clues Sheet

NAME _____

Dear Detective,

Someone has robbed the National Bank of Illuminations in Washington D.C. It is your job to use the clues left by the perpetrators to locate and apprehend the robber. Your tools will be your power of deduction and your mathematical knowledge. Good luck cracking this case!

Sincerely,
Captain P. Thagoras

Clue 1

1. One surveillance camera was able to capture the image on the next page. The image shows the thief standing next to the door. In real life the door measures 84 inches but it is only 16.8 centimeters in the picture. If the person in the photo is 13.2 cm tall, how tall is suspect in real life? Report the height in feet and inches.

60 in. = 5 ft
 60 in = 5 ft 0 in
 62 in = 5 ft 2 in

Clue 2

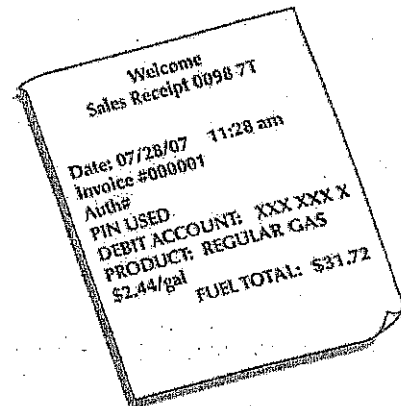
2. The robber stole only 25 pounds of quarters out of the coin machine. Quarters are weighed in ounces. If there are 16 ounces in 1 pound, how many ounces of quarters were stolen?

3. Each quarter weighs 0.2 ounces. How much money has been stolen from the bank?
(one)

Clue 3

4. A witness at the bank saw the getaway car stop at a nearby gas station. The gas station attendant said that the thief's tank was practically empty, and that he filled it completely. Luckily, he was also able to find the thief's receipt. Determine how many gallons of gas the thief purchased.

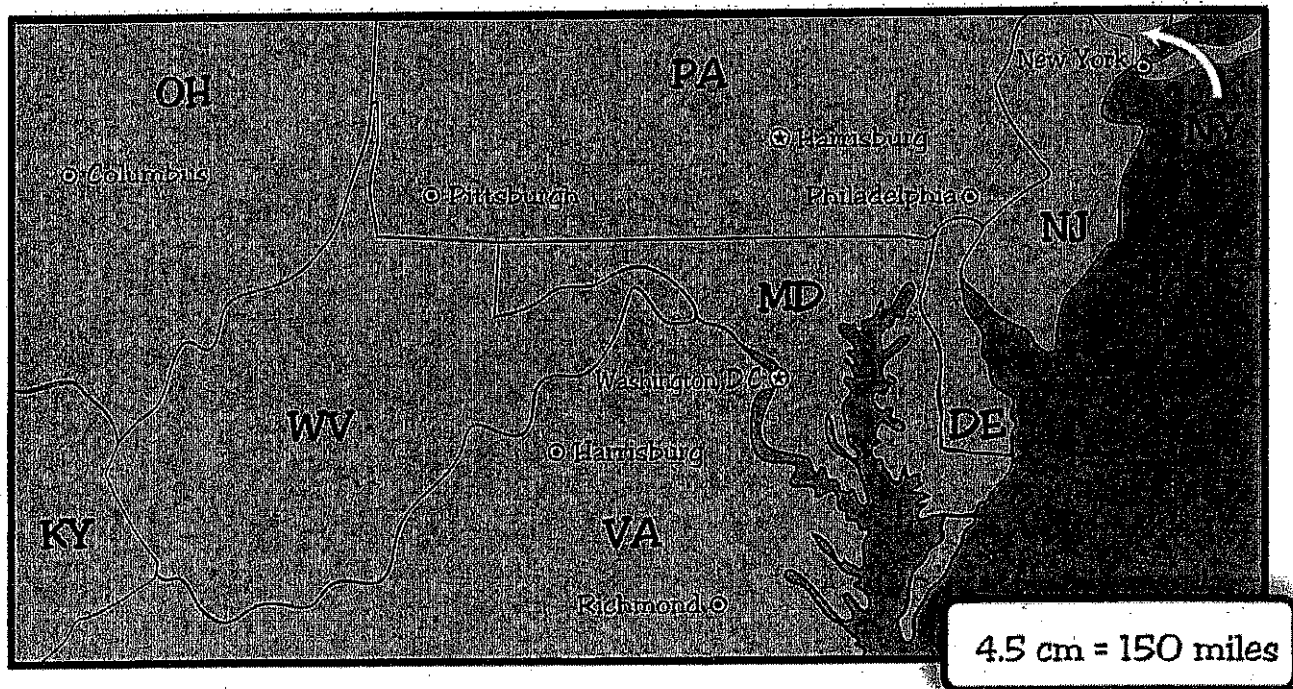
$$\frac{\$}{\text{gal}} = \frac{\$}{\text{gal}}$$



5. The getaway car was a silver 1989 HN Cosine. The car gets 25 miles per gallon of gas. If the car continued until it ran out of gas again, how far could it go?

Clue 4

6. Using only one tank of gas, what is the farthest city that the thief can reach?









$$\frac{\text{cm}}{\text{m}} = \frac{\text{cm}}{\text{m}}$$

Suspect List

NAME _____

1. Below is a list of possible suspects, their heights, where they were arrested, and how much stolen money they had. Use the answers from the Clue Sheet to select the culprit.

 <p>284863</p> <p>ROY G. BIV APPREHENDED IN <u>PITTSBURGH, PA</u> WITH \$500 HEIGHT: 6'3"</p>	 <p>0039120</p> <p>JEN ERIC APPREHENDED IN <u>PHILADELPHIA, PA</u> WITH \$500 HEIGHT: 5'6"</p>	 <p>5001286</p> <p>MATTHEW MATICS APPREHENDED IN <u>RICHMOND, VA</u> WITH \$640 HEIGHT: 6'3"</p>
 <p>4523214</p> <p>POLLY HEDRON APPREHENDED IN <u>HARRISBURG, PA</u> WITH \$640 HEIGHT: 5'6"</p>	 <p>9874221</p> <p>EVAN NUMBER APPREHENDED IN <u>COLUMBUS, OHIO</u> WITH \$500 HEIGHT: 5'6"</p>	 <p>1774521</p> <p>AL T. TUDE APPREHENDED IN <u>NEW YORK CITY</u> WITH \$640 HEIGHT: 6'3"</p>

2. Write a letter to the Captain explaining who you think is the thief. Make sure to justify your answer by explaining how you came to your decision.

Dear Captain,

Using the clues you have given me, I have deduced that _____
is the person that robbed the bank.

CASE
CLOSED