Use Logical Reasoning

Samer, Lamis, Shima, and Emad emptied their banks. They found $7.75, $4.35, $5.00, and $10.00, but not necessarily in that order. Lamis has twice as much money as Shima. Samer has an amount between Shima's and Lamis'. Who has $4.35?

ANALYZE: What are you asked to find?

CHOOSE: What strategy will you use?
Can you use logical reasoning?

SOLVE: How will you solve the problem?

Take the clues one at a time. Use a table to help you. Only one box in each row and column can have a "yes". Lamis has twice as much money as Shima. So, Lamis must have $10.00 and Shima $5.00. Fill in "yes" in those boxes, and fill in "no" in the rest of the boxes in those rows and columns. Samer has an amount between Shima's and Lamis'. $7.50 is between $5.00 and $10.00, so Samer must have $7.50. Fill in the rest of the boxes with "yes" and "no".

	$4.35	$5.00	$7.50	$10.00
Sameer	NO	NO	YES	NO
Lamis	NO	NO	NO	YES
Sima	NO	YES	NO	NO
Emad	YES	NO	NO	NO

So, Emad has $4.35.
CHECK: How can you check your answer?

My Real Life

Hala gave Rima Half of her jelly beans. Rima gave Wassim half of the jelly beans she received. Wassim Kept 8 of the jelly beans and gave the remaining 10 to Jad. How many jelly beans did Hala give to Rima?

Names	Hala	Rima	Wassim	Jad
# of Jelly Beans	a	a ÷ 2	a÷4= 8+10 a ÷ 4 = 18	10

Step 1: Wassim is the clue.

Step 2: Wassim receives one fourth of what Hala gave. He kept 8 and gave the rest which is 10. The expression will be:

a ÷ 4 = 18

Step 3: Solve the expression: a ÷ 4 = 18 → a = 18 x 4 = 72 jelly beans which is the number that Hala had.

Step 4: Divide the number that Hala had by two. 72 ÷ 2 = 36 jelly beans which is the number that Hala gave to Rima.

So, Rima got 36 jelly beans.