



### Homework: Example Problem Discussed in the session:

Mrs. Winnie went to a store, spent half of her money and then \$10 more. She went to a second store, spent half of her remaining money and then \$10 more. But she then had no money left. How much money did she have to begin with when she went to the first store?

**Solution: Discussed in session: Use the reverse strategy.**

- In the end, Money was zero. Then add 10 as she spent 10 more.
- This \$10 was only half of her remaining money so doubling, she had \$20 when she entered second store.
- Again, add \$10 as she spent 10 more.  $20 + 10 = 30$ .
- This \$30 is again half of her money she had initially. So Doubling it becomes  $30 \times 2 = 60$ .

So, Mrs. Winnie had \$60 when she went to the store.

**Puzzle 1:** Tom went to a store and spent one-third of his money. He went to a second store where he spent one-third of what remained and then had \$12 when he left. How much money did he have to begin at the first store?

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**Puzzle 2:** A bridge will collapse in 17 minutes.

4 people want to cross it before it will collapse. It is a dark night and there is only one torch between them.

Only two people can cross at a time.

"A" takes a minute to cross.

"B" takes 2 minutes.

"C" takes 5

and "D" takes 10 minutes

**Question:** How do they all cross before the bridge collapses?

D and C go at same time the 10 min