

Puzzle – 42

Q- Chain Link Puzzle

You have five pieces of chain, each consisting of three links. You want to make one long chain of these five pieces. Breaking open a link costs 1 dollar, and welding an open link costs 3 dollars. Is it possible to make one long chain of the five pieces, if you have just 15 dollars?

My Approach and Solution –

Take chain 1 and break open all three links: $1 \times 3 = 3$ Dollars

Take one open link to connect chain 2 and 3 = 3 Dollars.

Take another open link to connect chain 3 and 4 = 3 Dollars.

Take third open link to connect chain 4 and 5 = 3 Dollars.

Total $\Rightarrow 3 + 3 + 3 + 3 = 12$ Dollars