

## 1 Chocolate Bars

Author: N. Alexia Raharinirina (ZIB)
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Artwork: Till Hausdorf

## Challenge

To equip the elves Ra, Geb, and Bastet with enough food for their next journey to Snowtown, Santa Claus distributes chocolate bars into three bags: a red one, a green one, and a blue one. He decides to put the chocolate bars into the bags successively over several rounds, and starts by putting $r$ bars into the red, $g$ bars into the green, and $b$ bars into the blue bag. Then, in each round, he puts twice as many chocolate bars into each bag as in the previous round.

After two rounds, the red bag contains 3 chocolate bars, the green one contains 6 , and the blue one contains 9 . In the last round, Santa puts 32 chocolate bars into the red bag, $\gamma$ bars into the green one, and $\beta$ bars into the blue one.

How many chocolate bars did Santa Claus put in all three bags in total?

## Possible answers:

1. 189
2. 270
3. 378
4. 458
5. 570
6. 657
7. 745
8. 803
9. 926
10. 1034
