

Problems of the Day 2020

Day
18

- 1 A can holds 330 ml of pop.
Pop is sold in packs of 6



Karl buys 12 packs of pop.
How many litres of pop does he have?

$$\begin{aligned} 6 \times 330 &= 1,980 \\ 1,980 \times 12 &= 23,760 \\ 23,760 \div 1,000 &= 23.76 \end{aligned}$$

Karl has 23.76 litres of pop.

- 2 £290 is shared between 10 boys and 12 girls.

$$12 \times 15 = 180$$

$$290 - 180 = 110$$

Each girl receives £15

How much money does each boy receive, if they each get the same amount of money?

$$110 \div 10 = 11$$

Each boy gets £11

- 3 Here is a sequence

2, 5, 9, 12, 2, 5, 9, 12, 2, 5, 9, 12, ...

What is the sum of the first 200 numbers in this sequence?

Explain your method.

$$2 + 5 + 9 + 12 = 28$$

$$28 \times 50 = 1,400$$