

Mr Singh spends $\frac{1}{4}$ of his monthly salary on the repayment of a housing loan. Of the remainder, he spends $\frac{1}{5}$ on food and the PUB bill, and puts aside $\frac{1}{10}$ for transport costs. This leaves him with 630 a month. What is his monthly salary?

Solution.

We first find which part of salary stays after all payments

$$1 - \frac{1}{4} - (1 - \frac{1}{4})(\frac{1}{5} + \frac{1}{10}) = \frac{3}{4} - \frac{3}{4} \cdot \frac{3}{10} = \frac{21}{40}$$

Then his monthly salary is

$$630 \frac{40}{21} = 1200$$

Answer. 1200.