

Answer on Question #53315 – Math – Algebra

Question

Gary and Fred find some money. They find 4 different coins. Gary takes some of the money. He has 7p more than Fred. Write down the coins Gary and Fred could each have,

Solution

Penny coin is in denominations of 1p, 2p, 5p, 10p, 20p, 50p.

So assume that Fred has " x "p, but Gary has 7p more than Fred, therefore Gary has " $(x+7)$ "p.

They find 4 different coins, that's why denominations of each coins are different.

$x+x+7$ =sum of coins. This expression satisfying these coins denominations: 2p, 20p, 5p and 10p.

sum of coins= $2+5+10+20=37$ p.

So Fred has $15\text{p}=5\text{p}+10\text{p}$ and Gary has $22\text{p}=20\text{p}+2\text{p}$.

Answer: Fred has $15\text{p}=5\text{p}+10\text{p}$ and Gary has $22\text{p}=20\text{p}+2\text{p}$.