



Problem of the Week

Problem A

Counting Coins

The Coyne family keeps a jar on the counter to hold spare change. At the end of each week, everyone in the family puts any coins they have in the jar. At the end of each month they empty the jar and donate the money to a local charity.

At the end of last month the Coyne family counted the coins in their jar and noticed the following totals:

- There were twice as many toonies as quarters.
- There were 3 times as many loonies as toonies.
- There were 5 more dimes than toonies.
- There were 4 fewer nickels than quarters.
- There were 8 quarters in the jar.

(a) How *many coins* were in the jar at the end of last month?

(b) How *much money* was in the jar at the end of last month?

NOTE: In Canada, a nickel is worth 5 cents, a dime is worth 10 cents, a quarter is worth 25 cents, a loonie is worth 100 cents, and a toonie is worth 200 cents. Also, 100 cents is equal to 1 dollar (\$1).

