Is it possible to have 50 coins, all of which are pennies, dimes, or quarters with a total worth of $3?

Let

x = pennies

y= dimes

z= Quarters

x + y +z = 50

1x + 10y +25z = 300

1x +10y +25z = 300

* x + y + z = 50

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9y + 24z = 250

GCD (9, 24) = 3

24 = 2 (9) +6

9 = 1 (6) +3

6 = 2 (3) +0

3 does not divide 250

Therefore, there is no solution and it is not possible to have 50 coins, all of which are pennies, dimes or quarter with a total worth of $3.