A collection of coins made up of nickels, dimes and quarters is worth $ 4.50. There are three times as many dimes as nickels and 4 less quarters than dimes. We need to find how many of each coin there is.

Using n for nickels, d for dimes and q for the number of quarters, write three equations that you would use to solve this situation.

10d+5n+25q = 450

d=3n

d-q =4

There were 5 nickels

There were 15 dimes

There were 11 quarters

A collection of coins made up of nickels, dimes and quarters is worth $ 4.50. There are three times as many dimes as nickels and 4 less quarters than dimes. We need to find how many of each coin there is.

Using n for nickels, d for dimes and q for the number of quarters, write three equations that you would use to solve this situation.

d-3n=0

0.1d+0.05n+0.25q = 4.50

d =4 +q

There were 5 nickels

There were 15 dimes

There were 11 quarters

Note that the equations are compared against a list of planes.

Entering the same plane twice, even in a different form produces the expected error.

This helps the student avoid the frustration of attempting to solve a flawed set of equations.

A collection of coins made up of nickels, dimes and quarters is worth $ 4.50. There are three times as many dimes as nickels and 4 less quarters than dimes. We need to find how many of each coin there is.

Using n for nickels, d for dimes and q for the number of quarters, write three equations that you would use to solve this situation.

10d+5n+25q = 450

0.1d+0.05n+0.25q = 4.50

d =4 +q

There were 5 nickels

There were 15 dimes

There were 11 quarters

A collection of coins made up of nickels, dimes and quarters is worth $ 4.50. There are three times as many dimes as nickels and 4 less quarters than dimes. There are a total of 31 coins. We need to find how many of each coin there is.

Using n for nickels, d for dimes and q for the number of quarters, write three equations that you would use to solve this situation.

10d+5n+25q=450

d=3n

d-q=4

There were 5 nickels

There were 15 dimes

There were 11 quarters

A collection of coins made up of nickels, dimes and quarters is worth $ 4.50. There are three times as many dimes as nickels and 4 less quarters than dimes. There are a total of 31 coins. We need to find how many of each coin there is.

Using n for nickels, d for dimes and q for the number of quarters, write three equations that you would use to solve this situation.

10d+5n+25q=450

d-d+q=3n-4

n+d+q=31

There were 5 nickels

There were 15 dimes

There were 11 quarters

Looks very similar to the above; this example is overloaded.

Here the student entries are not compared to a list of planes; any three planes that are independent and also contain the solution are accepted.

The student can combine planes and the answer will still be accepted.

A collection of coins made up of nickels, dimes and quarters is worth $ 4.50. There are three times as many dimes as nickels and 4 less quarters than dimes. There are a total of 31 coins. We need to find how many of each coin there is.

Using n for nickels, d for dimes and q for the number of quarters, write three equations that you would use to solve this situation.

10d+5n+25q=450

d-d+q=3n-4

q=3n-4

There were 5 nickels

There were 15 dimes

There were 11 quarters