

S^v 1.2 #24

Rock's

1/14/11

23 coins, nickels & dimes.

Adds up to \$1.75. How many coins were nickels?

let x = the # of nickels

y = " " " " dimes

$$23 \text{ coins} \Rightarrow x + y = 23$$

$$\text{Adds up to } \$1.75 \Rightarrow .05x + .1y = 1.75$$

$$\text{Now, } x + y = 23 \Rightarrow$$

$$y = 23 - x, \text{ so}$$

$$.05x + .1y = 1.75 \text{ becomes}$$

$$.05x + .1(23 - x) = 1.75, \text{ which you solve for } x.$$

When you have x , you get y from

$$y = 23 - x.$$

~~Once you have x & y , you find final answer by finding~~

→ Don't need y , since x = # of nickels answers the question!