Let John has *x* quarters and *y* nickels. Then *x +y = 111* (1).

0.25x + 0.05y = 16.75 (16,75$ = 1675 cents), consequently 25x + 5y = 1675 (2).

$$\begin{cases} x + y = 111, \\ 25x + 5y = 1675; \end{cases}$$

(2) - (1)*5 $\rightarrow$ $20x = 1120$, $x = \frac{1120}{20} = 56$. $y = 111 - 56 = 55$.

Answer: 56 quarters and 55 nickels.