4.NF Dimes and Pennies

Task

A dime is $\frac{1}{10}$ of a dollar and a penny is $\frac{1}{100}$ of a dollar.

What fraction of a dollar is 6 dimes and 3 pennies? Write your answer in both fraction and decimal form.

IM Commentary

Students may think of this task in different ways. Some may think of the equivalence between dimes and pennies, stating that 6 dimes is equivalent to 60 pennies, thus giving a total of 63 pennies which can be represented as $\frac{63}{100}$ or 0.63 of a dollar. Others may think of $\frac{6}{10}$ as being equivalent to $\frac{60}{100}$ and then add $\frac{60}{100}$ plus $\frac{3}{100}$ to total $\frac{63}{100}$ or 0.63 of a dollar.

Solution

6 dimes is 60 pennies, so 6 dimes and 3 pennies is 63 pennies, which is $\frac{63}{100} = 0.63$ of a dollar.

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