## Comparing Two Linear Functions using Tables and Algebraic Equations

Patrick and Leonard are brothers who each have money saved. The amount of money, $y$ dollars, that each brother has left in savings after $x$ weeks is a linear function. Patrick's function is represented by a table, and Leonard's function is represented by an equation.

| Function 1- Analyze Table to find Rate of Change |  |  |  |  | Function 2- Analyze Algebraic Equation |
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| Patrick's Savings |  |  |  |  | Leonard's Savings |
| Number of Weeks ( x ) | 0 | 5 | 15 | 20 | Let $y$ be the amount of savings Leonard has left after $x$ weeks. |
| Amount of Money ( y dollars) | 200 | 175 | 125 | 100 | Amount of money: $y=250-10 x$ |

a) Write an algebraic equation to represent Patrick's linear function.
b) Use a verbal description to compare the two functions.

