

Unit 2 Day 4 Notes: Domain and Range Application Problems

F-IF.2: I can use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of context.

1. Hector's service club is raising money by wrapping presents in the mall. The service club is charging \$3 for every present they wrap, x . They are able to wrap 7 presents every hour. Domain

Part A: Write the function that represents the amount of money, in dollars, the club will earn for wrapping x presents for one hour.

$$f(x) = 3x$$

Part B: Find the reasonable **domain** for the function.

$$D: \{0, 1, 2, 3, 4, 5, 6, 7\}$$

Part C: Find the reasonable **range** for the function. * plug each domain value into Part A *

$$R: \{0, 3, 6, 9, 12, 15, 18, 21\}$$

2. Victor started to donate money to the St. Jude Children's Hospital. He started off by a \$100 donation and wants to donate \$10 every month for 6 months in a row. Domain

Part A: Write the function that represents the amount of money, in dollars, the Victor will donate for x , months.

$$f(x) = 100 + 10m$$

Part B: Find the reasonable **domain** for the function.

$$D: \{0, 1, 2, 3, 4, 5, 6\}$$

Part C: Find the reasonable **range** for the function.

$$R: \{100, 110, 120, 130, 140, 150, 160\}$$