Name _____   Date _____

Comparing Properties of Two Functions - Matching Worksheet

Write the letter of the answer that matches the problem.

_____ 1. Compare the following functions to determine which has the greater rate of change.

Function 1: $y = 3x + 4$
Function 2: $y = 5x + 7$

a.   Light Bulbs

_____ 2. Compare the two linear functions listed below and determine which has a negative slope

Function 1: Toffees

Gino has 18 toffees at the start of the day. He buys 10 toffees per day. Write the rule for the total number of toffees as a function of the number of the days (d). $c = 18 + 10d$

Function 2: Light Bulbs

Shamir has 15 light bulbs at the start of the day. He sold 2 light bulbs per day. Write the rule for the total number of light bulbs as a function of the number of the days (d). $c = 15 - 2d$

b. $y = 7x + 3$

_____ 3. Compare the following functions to determine which has a negative slope.

Function 1: $y = 16 - 6d$
Function 2: $y = 16 + 5d$

c. $y = 5x + 7$

_____ 4. Compare the following functions to determine which has the greater rate of change.

Function 1: $y = 5x + 2$
Function 2: $y = 7x + 3$

d. $y = 16 - 6d$