**Lesson 6.5- Comparing Properties of Linear Equations**

**Example 1:**

|  |  |
| --- | --- |
| x | f(x) |
| 5 | 20 |
| 6 | 24 |
| 7 | 28 |
| 8 | 32 |

The domain of each function is the set of all real numbers x such that 5 ≤ x ≤ 8. The table shows some ordered pairs for ƒ(x). The function g (x) is defined by the rule g (x) = 3x + 7.

|  |  |
| --- | --- |
| x | g(x) |
| 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |

**Example 2:**

The domain of each function is the set of all real numbers x such that 6 ≤ x ≤ 10. The table shows some ordered pairs for ƒ(x). The function g (x) is defined by the rule g (x) = 5x +11.

|  |  |
| --- | --- |
| x | f(x) |
| 6 | 36 |
| 7 | 42 |
| 8 | 48 |
| 9 | 54 |
| 10 | 60 |

|  |  |
| --- | --- |
| x | g(x) |
| 6 |  |
| 7 |  |
| 8 |  |
| 9 |  |
| 10 |  |

**Example 3:**

Write a rule for each function, and then compare their domain, range, slope, and y-intercept.

One group of hikers hiked at a steady rate of 6.5 kilometers per hour for 4 hours. The function ƒ(t) represents the distance this group of hikers hiked in t hours.

The graph shows the distance a second group of hikers hiked, g(t) (in kilometers), as a function of t (in hours).

Write a rule for each function

**Homework: Workbook Pages 287-289 (1-10)**