Algebra 2 Honors- Week 3 Homework

**Monday-**

Daniel is playing his favorite video game and noticed that the points he earned every minute follow a linear pattern. Here is a table showing his total points for the first several minutes of play.

|  |  |
| --- | --- |
| Minutes: x | Points: f(x) |
| 0 | 1550 |
| 1 | 1900 |
| 2 | 2250 |
| 3 | 2600 |
| 4 | 2950 |

1. Write a function that represents this scenario.
2. After 10 minutes, how many points will he have?
3. If Daniel has 12,050 points, how many minutes has he been playing?

**Tuesday-**

Each of these scenarios represent a linear situation. Find the equation of each in slope-intercept form. For each problem, identify what the slope and the y-intercept mean to the scenario.

1. The length of a person’s femur and height are linearly related. One person has a 40 cm femur and is 162 cm tall. Another person has a 45 cm femur and is 173 cm tall.
2. Steven sells vacuums on commission. He made $235 selling 5 vacuums and $376 selling 8 vacuums.
3. The Smiths had to have a plumber come out twice this year. The first time he was there for 3 hours and charged them $196. The second time he was there for 5 hours and charged them $280.
4. Using a certain calling card, a 5-minute overseas call costs $5.91 and a 10-minute call costs $10.86.

**Wednesday-**

Amazon is selling some of its DVDs for $3. Leah has $30 that she can spend. Here is a function that models this situation: f(x) = 30 – 3x

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**Thursday-**

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**Friday-**

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