Algebra 2: Linear Regression Homework

Linear Regression Problems:

The data below are actual data collected by Mrs. Bonger regarding her fuel economy.

|  |  |
| --- | --- |
| Gallons of Gas Used | Miles Driven |
| 12.3 | 228.8 |
| 7.9 | 156.4 |
| 14.7 | 308.7 |
| 5.5 | 90.2 |

Use linear regression to find an equation relating the gallons of gas used and the miles driven.

1.       Equation:\_\_\_\_\_\_\_\_\_\_\_\_\_          x stands for:\_\_\_\_\_\_\_\_\_\_\_\_       y-stands for:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.        The slope of the line represents the miles per gallon.  How many miles per gallon does his truck get?     \_\_\_\_\_\_\_\_

3.       If he completely fills his 16 gallon tank, how far could he go before running out of gas? \_\_\_\_\_\_\_\_

