Chad Huntebrinker HW3 Problem 1.28

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#Load the data  
y\_data <- c(8487,8179,8362,8220,6246,9100,6561,5873,7993,7932,6491,  
6816,9639,4595,5037,4427,6226,10768,8335,12311,10104,10503,7562,8593,7133,10205,14016,  
5959,3764,4297,7562,4844,5777,3599,3219,11187,2105,6650,11371,4517,7348,5696,4995,9248,6860,9776,  
4280,11154,3442,9674,7309,4530,4017,7122,5689,6109,3343,5029,4330,5425,8769,6880,6538,6521,9423,  
9697,3805,3134,3433,2979,6836,5804,7986,10994,11322,8937,8807,11087,10355,7858,3632,8040,6981,7582)  
  
x\_data <- c(74,82,81,81,87,66,68,81,74,82,75,82,78,84,82,  
79,78,73,77,65,77,76,79,79,78,84,78,81,89,85,77,74,80,84,88,75,77,78,  
61,91,83,77,85,70,88,80,82,82,82,70,64,79,83,77,76,80,84,82,81,74,81,  
76,78,78,79,83,79,83,81,84,64,67,75,73,77,64,75,80,83,85,91,88,83,76)  
  
#Plot the Data  
plot(y\_data ~ x\_data, pch = 16, xlab = "Highschool Diploma Percentage", ylab = "Crime Rate")  
  
#Fit a Linear Regression model  
lrgm <- lm(y\_data ~ x\_data)  
  
#Find b coefficients  
b\_coefficients <- lrgm$coefficients  
  
#Add the fitted line  
abline(b\_coefficients, lwd =2, lty =2, col="red")

