12

Find the equation of the regression line for the given data. Then construct a scatter plot of the data and draw the regression line. (The pair of variables have a significant correlation.) Then use the regression equation to predict the value of y for each of the given x-values, if meaningful. The table below shows the heights (in feet) and the number of stories of six notable buildings in a city.

1. x = 499 feet (b) x = 639 feet
2. x = 345 feet (d) x = 727 feet

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Height, x | 778 | 621 | 519 | 510 | 494 | 473 |
| Stories, y | 51 | 47 | 53 | 25 | 39 | 31 |

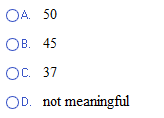
Find the regression equation

Y = \_\_\_\_x + (\_\_\_\_) (round three decimal places as needed)

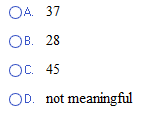
Choose the correct graph below



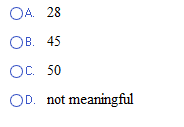
1. Predict the value of y for x = 499. Choose the correct answer below



1. Predict the value of y for x = 639. Choose the correct answer below



1. Predict the value of y for x = 345. Choose the correct answer below



1. Predict the value of y for x = 727.Choose the correct answer below

