

Post-Activity Quiz Answer Key

Solve the following problems. Show your work.

1. Determine the spring constant using Hooke's law given a force of -10 N and a displacement of 6 m. Round to the nearest hundredth.

Answer:

$$F_{spring} = -kx$$
$$\frac{-10N}{-6m} = \frac{-k(6m)}{-6m}$$
$$1.67N/m = k$$

2. Graph the line of best fit on the scatter plot below. Then determine the equation of the line of best fit.

Answers will vary, but expect students to draw lines of best fit and determine the equation based on their lines.

Below is an example acceptable line of best fit drawn on the scatter plot and equation of the line of best fit. This graph shows a possible correct answer for the equation, which is one acceptable line of best fit based on the scatter plot, but students' answers may vary.

Example equation of line of best fit: $y = \frac{10}{7}x + 0.57$

