Practice Problems: Research Questions

For each of the following situations, identify whether the research question of interest entails estimating a mean response or predicting a new response .

1. A researcher is interested in answering the question: “What is the average life expectancy for individuals who smoke 2 packs of cigarettes a day?”
2. A researcher is interested in answering the questions: “What is the lung function of an individual 80-year-old woman with Emphysema?”
3. A researcher is interested in answering the questions: “What is the typical weight of women who are 65 inches tall?”

# Answers:

1. Estimating a mean
2. Predicting a new response
3. Estimating a mean