* Supervised learning involves providing a data set with correct answers to the algorithm.
* Regression problems predict continuous-valued outputs, such as house prices or continuous values.
* Classification problems predict discrete-valued outputs, such as whether a tumor is benign or malignant.
* Breast cancer diagnosis involves predicting whether a tumor is benign or malignant based on its size.
* Machine learning algorithms can utilize multiple features or attributes to make predictions, including tumor size, age, and other medical characteristics.
* Support vector machines can handle an infinite number of features by using a mathematical trick.
* Regression problems predict continuous outputs, such as number of items sold, while classification problems predict discrete outputs, such as hacked vs. non-hacked accounts.