ML quiz

Question 1: True or False

**● 1: Linear regression is a supervised learning algorithm used for predicting**

**continuous numerical values (False)**

**● 2: Linear regression assumes a linear relationship between the output**

**variable and the input variables (True)**

**● 3: The objective of linear regression is to minimize the sum of squared errors**

**between the predicted values and the actual values (True)**

**● 4: Gradient descent is one way to minimize this objective by finding the**

**optimal parameters that minimize this sum (True)**

**● 5: The hypothesis (model) of linear regression for a single input feature x**

**takes the form θ1x+θ (True)**

**● 6: Gradient Descent is an optimization algorithm for finding the minimum of a**

**differentiable function (True)**

**● 7: Gradient descent works directly for linear regression with absolute error as**

**cost function (False)**

**● 8: What if we approximated the absolute error with a function as following?**

**then we can use the gradient descent becuse the function now is differentiable**