

[Module 4 - Restricted Boltzmann](#)[Course](#) > [Machines \(RBMs\)](#)> [Graded Review Questions](#) > Graded Review Questions

Graded Review Questions

Instructions for Graded Review Questions

1. Time allowed: **Unlimited**

- We encourage you to go back and review the materials to find the right answer
- Please remember that the Review Questions are worth 50% of your final mark.

2. Attempts per question:

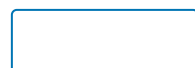
- One attempt - For True/False questions
- Two attempts - For any question other than True/False

3. Check your grades in the course at any time by clicking on the "Progress" tab

Review Question 1

1/1 point (graded)

What is the main application of RBM?

☐ Data dimensionality reduction☐ Feature extraction☐ Collaborative filtering☒ All of the above ✓

You have used 1 of 2 attempts

Review Question 2

1/1 point (graded)

How many layers does an RBM (Restricted Boltzmann Machine) have?

☐ Infinte

☐ 4

☒ 2 ✓

☐ 3

☐ All of the above

You have used 1 of 2 attempts

Review Question 3

1/1 point (graded)

How does an RBM compare to a PCA?

☐ RBM cannot reduce dimensionality

☐ PCA cannot generate original data

☐ PCA is another type of Neural Network

☒ Both can regenerate input data ✓

☐ All of the above

Submit

You have used 1 of 2 attempts

Review Question 4

1/1 point (graded)

Which statement is TRUE about RBM?

- ☐ It is a Boltzmann machine, but with no connections between nodes in the same layer
- ☐ Each node in the first layer has a bias
- ☐ The RBM reconstructs data by making several forward and backward passes between the visible and hidden layers
- ☐ At the hidden layer's nodes, X is multiplied by a W (weight matrix) and added to h_bias
- ☒ All of the above ✓

Submit

You have used 1 of 2 attempts

Review Question 5

1/1 point (graded)

Which statement is TRUE statement about an RBM?

- ☐ The objective function is to maximize the likelihood of our data being drawn from the reconstructed data distribution
- ☐ The Negative phase of an RBM decreases the probability of samples generated by the model
- ☐ Contrastive Divergence (CD) is used to approximate the negative phase of an RBM
- ☐ The Positive phase of an RBM increases the probability of training data

☒ All of the above ✓

Submit

You have used 2 of 2 attempts

✓ Correct (1/1 point)