1. **If X is the standard notation for the input to an RNN, what are the standard notations for the outputs?** 1 / 1 point

- ○ Y
- ○ H
- ◉ Y(hat) and H
- ○ H(hat) and Y

✓ Correct

2. **What is a sequence to vector if an RNN has 30 cells numbered 0 to 29** 1 / 1 point

- ○ The Y(hat) for the first cell
- ○ The total Y(hat) for all cells
- ○ The average Y(hat) for all 30 cells
- ◉ The Y(hat) for the last cell

✓ Correct

3. **What does a Lambda layer in a neural network do?** 1 / 1 point

- ○ Changes the shape of the input or output data
- ◉ Allows you to execute arbitrary code while training
- ○ There are no Lambda layers in a neural network
- ○ Pauses training without a callback

✓ Correct

4. What does the axis parameter of tf.expand_dims do? 1 / 1 point

- Defines the axis around which to expand the dimensions
- Defines the dimension index to remove when you expand the tensor
- (•) Defines the dimension index at which you will expand the shape of the tensor
- Defines if the tensor is X or Y

✓ Correct

5. A new loss function was introduced in this module, named after a famous statistician. What is it called? 1 / 1 point

- Hyatt loss
- Hawking loss
- Hubble loss
- (•) Huber loss

✓ Correct

6. What's the primary difference between a simple RNN and an LSTM 1 / 1 point

- LSTMs have a single output, RNNs have multiple
- (•) In addition to the H output, LSTMs have a cell state that runs across all cells
- LSTMs have multiple outputs, RNNs have a single one
- In addition to the H output, RNNs have a cell state that runs across all cells

✓ Correct

7. **If you want to clear out all temporary variables that tensorflow might have from previous sessions, what code do you run?** 1 / 1 point

- tf.keras.clear_session
- tf.cache.clear_session()
- tf.cache.backend.clear_session()
- tf.keras.backend.clear_session()

✓ Correct

8. **What happens if you define a neural network with these two layers?** 1 / 1 point

```
tf.keras.layers.Bidirectional(tf.keras.layers.LSTM(32)),
tf.keras.layers.Bidirectional(tf.keras.layers.LSTM(32)),
tf.keras.layers.Dense(1),
```

- Your model will compile and run correctly
- Your model will fail because you have the same number of cells in each LSTM
- Your model will fail because you need return_sequences=True after each LSTM layer
- Your model will fail because you need return_sequences=True after the first LSTM layer

✓ Correct