

## Graded quiz W3

### ✔ Congratulations! You passed!

Grade  
received **100%**

Latest Submission  
Grade 100%

To pass 80% or  
higher

1. How do Convolutions improve image recognition?

- ☐ They make processing of images faster
- ☒ They isolate features in images
- ☐ They make the image clearer
- ☐ They make the image smaller

✔ **Correct**

Spot on! Additionally, a properly designed convolution layer can even make training faster.

2. What does the Pooling technique do to the images?

- ☐ Isolates features in them
- ☐ Makes them sharper
- ☐ Combines them
- ☒ Reduces information in them while maintaining some features

✔ **Correct**

Good job! Pooling reduces information without removing all of the features.

3. True or False. If you pass a 28x28 image through a 3x3 filter the output will be 26x26

- ☒ True
- ☐ False

✔ **Correct**

Nailed it!

4. After max pooling a 26x26 image with a 2x2 filter, the output will be 56x56

- ☒ False
- ☐ True

✓ **Correct**

Yes! The output would actually be 13x13

5. How does using Convolutions in our Deep neural network impact training?

- ☒ Its impact will depend on other factors.
- ☐ It makes it slower
- ☐ It does not affect training
- ☐ It makes it faster

✓ **Correct**

Correct! Using convolutions might make your training faster or slower, and a poorly designed Convolutional layer may even be less efficient than a plain DNN!