1. Data Augmentation can not be done without Data Normalization. True or False? **1 / 1 point**

   ◉ False

   ○ True

   > ✓ **Correct**
   > Correct! Both are different concepts and are not dependent on each other.

2. We can specify data augmentation related arguments (like rotation or brightness) when initializing an instance of the ImageDataGenerator class. True or False? **1 / 1 point**

   ◉ True

   ○ False

   > ✓ **Correct**
   > Correct! This is the approach we took in the hands on project.

3. Consider the following piece of code: **1 / 1 point**

```
1  generator = tf.keras.preprocessing.image.ImageDataGenerator(
2      width_shift_range=[-40, -20, 0, 20, 40]
3  )
```

   Which of the following is True?

   ○ Width of images could be shifted by any of the values in the specified range. That is, any value randomly chosen from -40 pixels to +40 pixels will be applied.

   ◉ Width of images could be shifted by any of the values specified. That is, one of -40 pixels or -20 pixels or 0 pixels or 20 pixels or 40 pixels will be applied randomly.

   > ✓ **Correct**
   > Correct!

4. Select all that are True **1 / 1 point**

   ☑ Both zoom ranges below are equivalent:

```
1  zoom_range = [0.8, 1.2]
2  zoom_range = 0.2
```

   > ✓ **Correct**
   > Correct! We discussed this in Task 6 of the hands on project.

   ☐ Shear Transformation and Rotation are synonymous and do the same augmentation.

   ☐ Mean value of an example, obtained after applying feature-wise normalization, will always be 0 or close to 0.

5. Select all the methods that give us data iterators that can be used in the "fit" method of a Keras Model:

☑ ImageDataGenerator(some_args).flow(more_args)

✓ **Correct**
Correct!

☑ ImageDataGenerator(some_args).flow_from_directory(more_args)

✓ **Correct**
Correct!