

**Solution Quiz:**

Which of the following statement(s) is/are correct?

- (a) Interpretation methods are *only* used to explain the global behavior of a model.  
⇒ **Wrong**, there are several needs for interpretability. (Gain global and local insights how the IML model works, better control, improve and debug the IML model, justify decisions)
- (b) If a model-agnostic and a model-specific interpretation method are applied on the same ML model, the output of the two methods will always be the same.  
⇒ **Wrong**, as the methods work different they will probably give a divergent output.
- (c) While feature effects methods show the influence of a feature on the target, feature importance methods focus on a feature's impact on the model performance.  
⇒ **Correct**.
- (d) In IML we distinguish between global IML methods, which explain the behavior of the model over the entire feature space, and local IML methods, which only explain the prediction of individual observations.  
⇒ **Correct**.
- (e) Technically, Pearson correlation is a measure of *linear* statistical dependence.  
⇒ **Correct**.
- (f) All in the lecture mentioned measures for correlation and dependencies are limited to continuous random variables.  
⇒ **Wrong**, mutual information is not limited to continuous random variables.
- (g) A feature interaction between two features  $x_j$  and  $x_k$  is apparent if a change in  $x_j$  influences the impact of  $x_k$  on the target.  
⇒ **Correct**.