Night School 26: Developing Eye for Connection Design
Session 6: Connection Design Examples, August 17, 2021
Due: September 14, 2021, 8:00 am EDT – Submit through the online form

1. True or False: Engineers are not responsible for design decisions that conform to published Design Examples.
   a. True
   b. False

2. True or False: The procedures in Design Examples are AISC requirements.
   a. True
   b. False

3. True or False: Engineers must verify the accuracy, suitability, and applicability of Design Examples before relying on the information for any specific application.
   a. True
   b. False

4. True or False: As long as every limit state in a Design Example is satisfied, the *Specification* requirements have been satisfied.
   a. True
   b. False

5. Lapped plates:
   a. are prohibited from resisting compressive loads.
   b. can be safely designed to resist compressive loads.
   c. require more judgment and complex design models when resisting compressive loads.
   d. b and c
   e. None of the above.

6. A design example published by AISC:
   a. demonstrates the only viable approach to the design.
   b. demonstrates an approach to the design.
   c. demonstrates the approach to the design that works best for engineers and their projects.
   d. demonstrates the most economical approach to the design.

7. Design examples:
   a. always list all assumptions made.
   b. list all assumptions made that could impact design decisions.
   c. often reflect decisions that are based on implicit assumptions.
   d. always explicitly justify all assumptions made.

8. The criterion that that shear strength of base metal is stronger than the shear strength of a fillet weld:
   a. represents a requirement of the *Specification*.
   b. represents a requirement of the *Manual*.
   c. represents an assumption that must be satisfied in order to apply the design procedures in the *Manual*.
   d. represents a convenience.

9. Engineers:
   a. must always accurately and precisely determine the actual strength of all conditions in the structures they design.
   b. sometimes need only determine that a condition is “okay”, and this can often be accomplished without accurately and precisely determine the actual strength of the condition.
   c. do not need to concern themselves with the behavior of the actual structure because today’s design models are so precise.
   d. sometimes can assume conditions are okay because the conditions look like conditions that appear in the *Manual*.

10. Limit states in the *Specification*:
    a. are universally applicable and sufficient for the design of any structure that can be constructed of steel.
    b. are intended for routine use and not to provide specific criteria for infrequently encountered problems, which occur in the full range of structural design.
    c. are applicable and sufficient for the design of any structure that can be constructed of steel and that is not explicitly prohibited.
    d. are intended to be applied using professional judgment.
    e. Items b and d.