



1. For a cyclically-loaded (in tension) butt joint that features a transition in width or thickness, AWS D1.1:2015 *Structural Welding Code – Steel* requires what transition slope?
 - a. 1:1
 - b. 2:1
 - c. 2.5:1
 - d. 3.5:1

2. For which of the following joints would the issue of shear lag be of greatest concern?
 - a. A lap joint connected with longitudinal fillet welds of a length less than the width of the connection, and loaded in tension
 - b. A lap joint connected with longitudinal fillet welds of a length greater than the width of the connection, and loaded in tension
 - c. A lap joint connecting two equal-width plates with two transverse fillet welds along the end of each plate, lap length of five times the thickness of the thinner joint, and loaded in tension
 - d. None of the above – shear lag is not a consideration for any of these joints

3. True or False: The throat thickness of a CJP groove weld that connects two plates of different thicknesses is equal to the thickness of the thinner part joined.
 - a. True
 - b. False

4. Which of the following is a reason that one might select a single U CJP groove weld over a single V CJP groove weld?
 - a. A U groove is easier to prepare
 - b. A U groove accommodates variety root opening dimensions
 - c. A U groove uses less weld metal
 - d. A U groove does not require backgouging

5. Which of the following backing materials is considered fusible?
 - a. Steel
 - b. Copper
 - c. Ceramic
 - d. All of the above
 - e. Both (a) and (b)



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Quiz for Session 3: Welded Connection Details – October 29, 2019
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6. True or False: It is permissible make CJP groove welds without the use of backing, but such welds must undergo qualification testing.
 - a. True
 - b. False

7. Which of the following is NOT a factor when determining the effective throat of a PJP groove weld?
 - a. Groove type
 - b. Load type and direction relative to the weld axis
 - c. Welding position
 - d. Welding process

8. Maximum and minimum fillet weld sizes are prescribed to ensure which of the following?
 - a. Design requirements are met
 - b. Economy is achieved
 - c. Good fabrication practice is followed
 - d. All of the above

9. Which of the following sets the maximum size limit of a fillet weld in a tee joint?
 - a. Thickness of the thinner part joined
 - b. Thickness of the thicker part joined
 - c. Welding process
 - d. None of the above

10. True or False: The effective length of a fillet weld is always taken as its actual length.
 - a. True
 - b. False

