1. The first all steel skyscraper was
   a. Home Insurance Building  
   b. The Rookery  
   c. Tacoma Building  
   d. Rand-McNally Building  
   e. Reliance Building

2. The first AISC Specification was published in
   a. 1921  
   b. 1923  
   c. 1928  
   d. 1986  
   e. 2005

3. The first priority of the American Institute of Steel Construction was
   a. Standardization of specifications  
   b. Standardization of practice  
   c. Standardization of shape data  
   d. all of the above  
   e. other

4. As the reliability index increases, the safety of the structure
   a. Decreases linearly  
   b. Increases linearly  
   c. Changes but not always in the same direction  
   d. Decreases  
   e. Increases

5. In the current AISC Specification, how is the safety factor, $\Omega$, related to the resistance factor, $\phi$?
   a. It depends on the specific load combination  
   b. It varies as the live to dead load ratio varies  
   c. It is 1.5 divided by the resistance factor  
   d. It is a function of the limit state being considered  
   e. None of the above
Basic Steel Design
Quiz for Session 1: Introduction to Basic Steel Design – January 28, 2020
Due: February 25, 8:00 a.m. EST – Submit through the online form

6. At a live to dead load ratio of 9, the effective load factor in LRFD is
   a. 1.24
   b. 1.50
   c. 1.56
   d. 1.60
   e. 1.73

7. The dimensions of rolled structural steel shapes (W-shapes) are standardized through
   a. AISC 360
   b. ASTM A992
   c. ASTM A500
   d. ASTM A53
   e. ASTM A6

8. What is the most common chemical component of steel?
   a. Copper
   b. Carbon
   c. Iron
   d. Sulfur
   e. Molybdenum

9. Which of the following are not used to describe behavior of structural steel?
   a. $F_y$
   b. $f'_c$
   c. $E$
   d. $\varepsilon_y$
   e. $F_u$

10. Which of the following are true statements about second-order analysis?
    a. It is a linear analysis
    b. It is only required for super tall structures
    c. It can only be carried out through use of a computer
    d. It may have significant impact on the required strength of structures
    e. None of the above