



17/18 CAD 1 Q1 Study Guide

- 1) What is engineering?
- 2) CAD?
- 3) Systems of Technology
 - a. How many?
 - b. List all of them
- 4) Design Process
- 5) Safety
 - a. Band Saw
 - b. Drill Press
- 6) AutoCAD
 - a. Object Snap
 - b. Ortho
 - c. Lines
 - d. Multi-view
 - e. Dimensions
- 7) Bridges
 - a. Brief History
 - b. How they work
 - c. Types
 - i. Beam
 - ii. Truss
 - iii. Suspension
 - iv. Cable Stay
 - v. Girder
 - vi. Arch
 - d. Forces
 - i. Compression
 - ii. Tension
 - iii. Bending
 - iv. Dead Load vs. Live Load
 - v. Torsion
 - vi. Thermal Expansion & Contraction
 - vii. Shear
 - viii. Elastic & Plastic Deformation
 - ix. Elastic Limit
 - x. Strongest Shape