



## Technical Sketching Challenge

**The Challenge:** This event provides an opportunity for an individual student to combine problem solving and sketching to complete an assigned problem. Participants will demonstrate their ability to solve an on-site engineering graphic problem using standard sketching techniques to produce a multi-view drawing. Participants will analyze, and interpret a pictorial drawing, then produce the multi-view drawing using accurate sketching techniques, using standard drafting rules, and problem solving techniques to solve the engineering graphic problem. The final product will be an orthographic projection sketch / multi-view drawing produced from an assigned pictorial drawing.

**Time limits:** Entrants are allowed one (1) hour to complete the technical sketching problem.

Late arrivals will have the remaining time in competition for completing their entry.

**Procedure:** Participants report to the event area at the time stated.

Then students will be given the technical sketching rules & problem and the drawing will begin.

### General rules and regulations:

- A. Graph paper for the on-site drawing problem will be furnished at the site.
- B. Participants may not bring any notes or reference materials into the drawing room.
- C. Each participants will provide their own pencil and eraser.
- D. Drawings will be collected in order of completion and time will be recorded

### Criteria for judging:

**Neatness:** Is the drawing neat and free of eraser marks, lack of smudges, legible writing.

**Proportion and Size:** All objects drawn to proper proportion and size as given.

**Speed:** of completion, -1 point per minute (not contingent on quality)

**Graphically Accuracy:** Drawing views provided are sufficient, appropriate, and correct.

**Completeness:** The detail drawing is complete with all appropriate features, line work and following accepted industry practice.

**Missing lines:** -5 points each.

Any rules and regulation violation = (-0 to -20 points)

Each minute of drawing production cost -1 point.

Each entry starts the event with a 200 point rating

Each mistake/minute cost 5 rating points each

Awards in level I and II.

Scoring Tally:

The Drawing rating scale is 0 to 200.

\_\_\_\_\_ Total minutes of drawing production time

(note: each minute of drawing production costs **-1 rating point**)

\_\_\_\_\_ Total mistakes multiplied by 5 (note: mistake on the drawing cost **5 rating points each**)

\_\_\_\_\_ **Total score (200 points minus production minutes & mistakes)**

\_\_\_\_\_ **Any rules and regulation checklist violation (up to -20 points)**

\_\_\_\_\_ **Entrant Ranking**