



Project: Design Change & Parametric Modeling (Day 1AM)

Time: 3 Hours

Marks: 25 points

Given:

Secondary and Post-Secondary

- Annotation & View Guide
- Light Bar Component Drawings

1 Task:

Create the following:

Secondary and Post-Secondary

- 1.1 Complete the Configuration Table in drawing SCNC21-01-0001
- 1.2 Using the provided detail drawings, recreate a lightbar with eight versions as detailed in the configuration table
- 1.3 Assembly Detail Drawings (8 Sheets)
 - One sheet for each of the eight configurations
 - Detailed as per the Annotation & View Guide
- 1.4 Use your Skills Canada B-size template for final layout and detail drawings
- 1.5 Visually appealing rendered image of all eight light bar configurations, exported as .jpg
 - Leave the rendering open on the PC for evaluation upon completing the competition

2 Output:

Secondary and Post-Secondary

- 2.1 Create a single PDF file of your final drawing requested in the tasks specified above
- 2.2 Name your file: ### Day1AM.pdf (### is your unique contestant number.)
 - **Files using wrong names will be penalized 3 points per file**
- 2.3 Create a visually appealing rendering of light bars and export as a .jpg in 1280 x 720 format

3 General:

- 3.1 Each task throughout the competition is independent from the others.
- 3.2 **DO NOT** include any part of your name, school, province/territory in documents, or when naming files and folders being submitted.
 - Any file, identified by any part of a competitors' name, school, province/ territory, will not be judged.

- 3.2 3.3 When you have finished working on a specific day, do not close project files or turn off your computer, Judges will view and mark your work on screen as needed.
- 3.3 3.4 Ask the judges before leaving the competition area as the judges may require your assistance accessing your work.

4 Assessment:

Task 1.1 Configuration Table

- Using the mathematical patterns in the given fields of the configuration table, calculate the missing fields: 4 points

Task 1.2 Parametric Change

- Recreate all the detailed parts: 4 points
- Assembled the parts with parametric links that allow the light bar to change shape and size to suit the configuration table: 6 Points

Task 1.3 Assembly Detail Drawings

- Select annotations identifiable from the details you create with reference to the Annotation and View Guide: 8 points

Task 1.5 Visually appealing rendered image of light bars

- Judged based on visual appeal and conformity to specifications
Provided: 3 points