

b.

2010 MICHIGAN SkillsUSA CHAMPIONSHIPS Task and Materials List

SKILL OR LEADERSHIP AREA: Technical Drafting

CONTEST RULES:

1. Once the contest begins no technical assistance will be given to the contestants. Only general instructions on contest procedure will be given.
2. Contestants must be dressed business casual *or they will lose points*.
3. Contestants using CAD software other than provided by Lansing Community College must bring the software/computer to LCC on Friday before 5:00 pm. This will give officials time to install, set-up and test their software/computer. This requirement is so that non-standard software will meet the contest performance outcomes requirements before the contest date. If
4. Contest drawing requirements *may* include the following:
 - a. **Model** - create a model from an actual part given to the contestant, which is to be measured and free hand sketched before modeling. This model will be left on the contestant's computer screen.
 - b. **Assembly** - create assembly drawings from various detail drawings. May include revisions, which must be notated correctly. More than one view may be included per sheet. Views should be spaced evenly and drawn to scale as well as ballooned / called out with appropriate numbers.
 - c. **Design** - given drawings/specs of certain parts, mating or corresponding part(s) must be designed and drawn (Le., given A and C, must design B).
 - d. **2D Detailing** - given a large assembly drawing, contestant must pull out various parts and detail for manufacturing; details must be completely dimensioned and documented. Contestant may be required to pull out 3D solids and convert to 2D. Contestant may have to apply revisions.
 - e. **Written Test** - Contestant may be given a multiple-choice test based on appropriate drafting standards or information related to the contest drawing.

CONTEST INFORMATION:

1. Approximately five hours will be allowed for the entire contest (free-hand technical sketching and computer). A specific time limit will be determined by the technical committee and given to the contestants during the contest orientation. Sketching and taking notes during the contest is permitted.
2. **Contestants should report to the competition area 30 minutes prior to the contest start time.** Contestants finishing early will gain no advantage nor receive bonus points. However, it is suggested that the contestants remain in the designated area until their plots are completed. Then contestant **MUST** leave the contest area.
3. Contestants must be able to prepare their drawings for plotting. Contestants **will** plot their drawings. Contest officials may assist with plotting the drawings.
4. **FILE MANAGEMENT IS THE RESPONSIBILITY OF THE CONTESTANTS.**
 - a. NO pre-drawn CAD files are allowed unless it is part of the software package. Only software-provided library files will be allowed.
 - b. No zip, flash, floppy, or CD files are allowed.
5. Contestants may bring published reference books including software manuals, technical drafting textbooks and Machinery's Handbook. Student notebooks and copied materials are not allowed.
6. Contestants **must** bring the following items with them to the contest site: calculator, pencils, calipers, mechanical ruled scale and 1-page resume. (*Note: No other drafting equipment is required except for the items previously listed.*)
7. The contest will follow SkillsUSA National guidelines. Non-compliance with contest rules may result in disqualification.

All questions and potential changes must be addressed before April 1, 2010!

SCORECARD Technical Drafting

Contestant Number

Items Evaluated	Possible Points					
Drawings 1, 2, 3,....	750					
Dimensioning						
Title Block Data						
Neatness/Quality						
Drawing 1 & 3	Weld Symbols					
Drawing 2 & 4 - Geometric Dimensioning and Tolerancing						
Drawing 5	Bill of Materials					
Interview Scores-Appearance	50					
Sketch	50					
Title Block-Written Directions Followed	25					
Written Test	150					
Resume Penalty	0 or -50 only					
Clothing Penalty	0 to -50					
Time Penalty	0 to -50					
Total Possible Points	1000					

**MICHIGAN SKILLSUSA CHAMPIONSHIPS
RATING SHEET**

**d.
TECHNICAL DRAFTING**

CONTESTANT NUMBER

ITEMS EVALUATED	possible	CONTESTANT NUMBER									
	points										
Written Test	20										
3 D Model	20										
Sketch	360										
Problem Solution (Each detail will be weighted by a % as determined by the Technical Committee based on the specific problem)											
Detail #1 80%											
Accuracy of Interpretation	50										
Dimensioning and Notes	30										
Layout and Presentation of Drawing	20										
Detail #2 70%											
Accuracy of Interpretation	50										
Dimensioning and Notes	30										
Layout and Presentation of Drawing	20										
Detail #3 60%											
Accuracy of Interpretation	50										
Dimensioning and Notes	30										
Layout and Presentation of Drawing	20										
Detail #4 50%											
Accuracy of Interpretation	50										
Dimensioning and Notes	30										
Layout and Presentation of Drawing	20										
Detail #5 40%											
Accuracy of Interpretation	50										
Dimensioning and Notes	30										
Layout and Presentation of Drawing	20										
Total Points Possible	JUDGE'S										
Total Points Scored											

***SAMPLE ONLY**

SIGNATURE:

Def. Accuracy of Interpretation - How well does the contestant understand the problem as it relates to their presentation of the part.