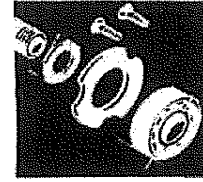




Pennsylvania - District 2  
*Education . . . with a competitive side*

## TECHNICAL DRAFTING COMPETITION



### Clothing Requirements

**For men:** Official white polo shirt with black dress slacks, black socks and black leather shoes.

**For women:** Official white polo shirt with black dress slacks or skirt, black socks or black or clear seamless hose, and black leather shoes.

*Note:* At the district level if a student is not able to wear the official Skills USA attire he/she may wear an outfit that would be acceptable in their specific field of study. *Please keep in mind that official Skills USA attire will be required at the state and national level STUDENT MUST BE IN STANDARD PROFESSIONAL OFFICE ATTIRE AS FOUND IN THE TRADITIONAL WORK ENVIRONMENT*

### Eligibility

Open to active SkillsUSA members enrolled in programs with technical drafting as the occupational objective.

### Equipment and Materials: Supplied by host school:

1. Computer w/Autodisk application

### Equipment and Materials: Supplied by contestant:

1. All Students must have a one-page, typewritten resume
2. Removable data storage device (flash drive)
3. Acceptable reference materials - See National guidelines
4. Computer with CAD software if Autodisk application is not being used.

**Knowledge Performance (½ Hour):** The contest will include a written knowledge test assessing general knowledge of technical drafting. Written portions may also exist during the skills portion of the contest. Knowledge of terms and principles used in the technical drafting profession will be required for the skill demonstration portion of the contest.

### Skill and Performance (3 Hours):

#### Part 1:

Students will be given a drawing of a typical mechanical assembly or selected mechanical components. Create multi-view drawings with all views required to completely describe each part. Include all dimensions in the proper location. All dimensions will be as shown on the drawing. 1/8".12" Arial font

Title Block: Create a full title block and appropriate size border of an A size sheet be sure the title block includes all pertinent information.

**Part 2:**

Given: Mechanical part drawing

Task: Create a multi-view drawing with all views required to completely describe each part. Include all dimensions in the proper location.

All dimensions will be as shown on the drawings provided.

Lettering: 1/8".12" Arial font

Title Block: Create a full title block and appropriate size border of an A size sheet. Be sure the title block includes all pertinent information.

- **For items or guidelines not covered refer to SkillsUSA National Tech Standards for this competition**

**Evaluation Criteria:**

100 possible points

***Written Test 10%***

- Terminology
- Drawing Practices

***Line Work 20%***

- Center Lines
- Hidden Lines
- Visible Lines
- Line Weights

***Dimensioning 20%***

- Accuracy
- Contour Location
- Per Accepted Practice
- Completeness

***Projection and Composition 20%***

- Proper Ortho Projection
- Auxiliary or Sections
- Composition and Spacing
- Completeness

***Problem Solution 20%***

- Solved as Intended
- Completeness
- Per Accepted Practice

***Text and Annotation 10%***

- Required General/Local Notes
- Spelling and Grammar
- Proper Technique & Completeness

## Technical Drafting Rating Sheet:

Items Evaluated	Possible Points	Contestant Score
Written Test	10	
Line Work	20	
Dimensioning	20	
Projection and Composition	20	
Problem Solution	20	
Text and Annotation	10	
Resume (Deduction)	-10	
Safety (Deduction)	-10	
Clothing (Deduction)	-5	
<b>Total</b>	<b>100</b>	

*Note: No cell phones or other electronic devices may be used at any time during a competition; this includes using a calculator function on a cell phone for competitions in which calculators are permitted.*