

Arizona State SkillsUSA Championships
April 18, 2017
Basic Technical and Basic Architectural Drafting

Advisors and Contestants

As you read through the enclosed information you will realize that the Basic Technical and Basic Architectural competitions have been rewritten in order to satisfy the many concerns that have been expressed over the last couple of years. It is hoped that these changes will encourage advisors, who have not competed lately, to reconsider entering their students. Each student will choose whether they want to compete in either the Basic Technical or Basic Architectural competitions. Upon receiving this email change notice, each advisor will also receive a copy of both the Basic Technical and Basic Architectural State Competition Problems. As in the past, the problems are being sent to you in advance so that you and your students will have time to develop a plan, use your resources, have time to complete each assignment, and present the best possible work that each student is capable of producing. Each student is to do and present their own work but can use resources such as textbooks, their instructors, and city building departments to answer questions. Contestants will arrive at the designated time and location for Basic Technical and Basic Architectural Drafting Competitions, with a complete set of plans.

Students may complete the assigned problems either on the board or CAD. They will be judged on completeness, accuracy, knowledge of drafting standards and professionalism. Board students will be competing against CAD students with no advantage given to either.

At the time of the SkillsUSA competition they will be given a dimensioning problem, either a simple floor plan or a machine part, they will work on during the four hour competition. Because the small boards, formerly provided by SkillsUSA, were in such bad shape, each student will be required to bring their own equipment for the dimensioning problem. Suggested equipment list: small drafting board or pad of vellum paper to draw on, T square, tape, pencil, eraser, architectural scale, 30/60 and 45 degree triangles, compass and circle templates, etc.

BASIC TECHNICAL PROBLEM

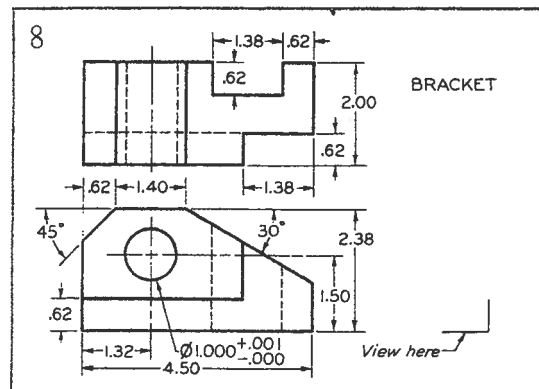
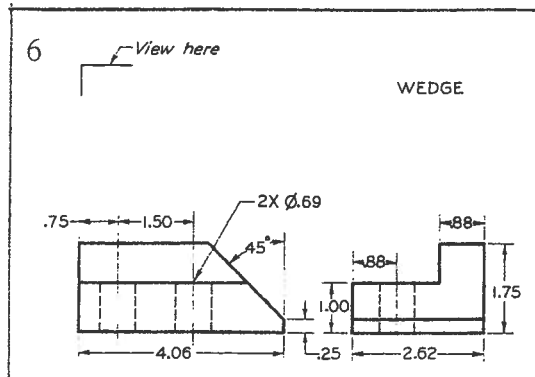
1. Study the attached drawings and determine the proper layout of each part.
2. Prepare a complete set of detailed working drawings using the multi (3) view projection method.
3. The drawings are to be drawn at full scale (1:1). You will need to draw a border line and complete title block on each sheet turned in.
4. Dimension each part using the aligned dimensioning method and include all notes.
5. After the working drawings are completed, draw a freehand isometric sketch of each problem.

BASIC ARCHITECTURAL PROBLEM

Each student will submit a complete set of plans from the floor plan and perspective drawing provided. The set will include:

1. **Site Plan:** Choose a lot in your community that is at least 60' x 120'. Show all required details and information.
2. **Foundation Plan with Details:** Choose either footing and stem wall or mono pour depending on your geographic location (desert or mountains).
3. **Floor Plan:** Show all walls, windows, doors (and their sizes), fixtures, cabinets, dimensions, notes, cutting plane line, and any other info needed to complete this plan.
4. **Section:** Develop one FULL section through a major portion of the house. Provide appropriate dimensions and callouts.
5. **Roof Plan:** Show a top view of your roof locating all ridges and valleys. Do not draw trusses or rafters.
6. **Elevations:** Draw 4 elevations; front, rear, right and left side. Do not provide any landscaping.

BASIC TECHNICAL PROBLEMS



BASIC ARCHITECTURAL PROBLEM

