



PURPOSE

To evaluate the competitor's understanding and ability to solve mathematical problems commonly found in the skilled trades, professional and technical occupations.

ELIGIBILITY

Open to active NYS SkillsUSA members.

CLOTHING REQUIREMENTS

NYS SkillsUSA Official Attire:

- Official red blazer, NYS Black Jacket, the older red national windbreaker or older red sweater and the Black or red Jacket from Nationals.
- Button up, collared, white dress shirt (accompanied by a plain, solid black tie), white blouse (collarless or small-collared) or white turtleneck, with any collar not to extend into the lapel of the outer layer coats
- Black dress slacks accompanied by black dress socks or black or skin tone seamless hose) or black dress skirt (knee- length, accompanied by black or skin- tone seamless hose).
- Black shoes, that are not backless or open toe.

Note: Contestants must wear their contest clothing to the contest orientation meeting. Also bring #2 pencil, resume, and safety assurance form.

EQUIPMENT AND MATERIALS

1. Supplied by technical committee:
 - a. Tables and chairs
 - b. Test problems and instructions
 - c. Scratch paper
 - d. Formula sheets and conversion tables/charts
2. Supplied by the competitor:
 - a. Hand-held calculator
 - b. No. 2 pencil
 - c. All competitors must create a one-page resume. See “Resume Requirement” below for guidelines.

Note: No reference materials may be used other than those provided by the technical committee.

RESUME REQUIREMENT

All competitors must create a one-page résumé and submit a hard copy at orientation. Failure to do so will result in a 10-point penalty. Note: Your resume may be judged as part of your contest. Check the Contest Guidelines and/or the updates page on the NYS SkillsUSA Web site: <https://www.nysskillsusa.org>

ORIENTATION

The following are required at the orientation meeting, or a penalty may apply. Refer to the penalties section.

1. Safety form will be collected
2. Resume will be collected.
3. SkillsUSA NYS Official attire is required.
4. NLSC form with student information should be in their name badges with their competition numbers displayed.

PROHIBITED DEVICES

Cell phones or other electronic devices not approved by the NYS Chairperson will be collected by the contest chair during the competition. Chairpersons will announce their acceptance by listing it on their standard or at the orientation meeting. In case of emergencies advisors should allow the competitors to take their phones to the contest areas.

If the competitor uses their device in a manner which compromises the integrity of the competition, the competitor's score may be penalized.

SCOPE OF THE COMPETITION

KNOWLEDGE PERFORMANCE

A written knowledge test is required. A sound knowledge of geometry, algebra, trigonometry, and basic statistics will prepare the students to exhibit their problem-solving skills for this part of the competition. Competitors are also required to take the NYS SkillsUSA Professional Development test at orientation.

SKILL PERFORMANCE

Competitors will demonstrate their ability to solve math problems that deal with skilled technical real-world scenarios.

COMPETITION GUIDELINES

1. The written knowledge test comprises 50 problems applicable to any career and technical field. It covers applications of the fundamental operations of whole numbers, fractions, and decimals, including applications of percentages, ratio and proportion, averages, areas, and volumes.
2. The written knowledge test will provide the student with the opportunity to demonstrate his or her problem-solving skills, not just mathematical ability.
3. Students have two hours to complete the problems and check their answers.
4. Hand-held calculators may be used. Competitors need nothing more than a simple scientific calculator that can be purchased for about \$10–\$15. A graphing calculator is not necessary. The test is based on real-world mathematical applications and reasoning — not theoretical mathematics.
5. No bonus will be given for early completion of the written knowledge test.