SKILL OR LEADERSHIP AREA: _____ Related Technical Math _____

CONTEST LOCATION:
Amway Grand Plaza Hotel
187 Monroe Avenue NW
Grand Rapids, MI 49503, US
(616) 774.2000
http://www.amwaygrand.com/

RESUME:
Each student must submit a one-page printed resume before the contest start at the contest site (present to contest coordinator, not judges).   This is the only time that resumes can be turned in. Failure to do so will result in a 10 point penalty.

STUDENT MUST SUPPLY:
● 1 page resume
● Same supplies as listed in the SkillsUSA Championships Technical Standards
● Calculator (all types are acceptable)

NOTE:
● *Please refer to the 2020 Technical Standards for specific contest details.*

CLOTHING REQUIREMENT (if different from National contest):
● SkillsUSA official dress
● No heals over 2"

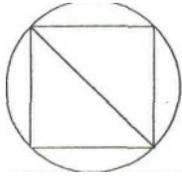**OBSERVERS ALLOWED IN ROOM DURING COMPETITION?**
● No

Revised 1/14/2020

Related Technical Math
Sample Questions

1. You have decided to build a log cabin out of the trees on your property. Most of the trees are more than 8 inches in diameter. What is the largest square timber that could be cut from an 8" log? (Remember to round down to the nearest !/2 inch.)
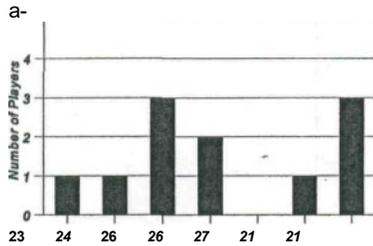

2. Americans are very generous, giving to various charities and religious organizations. In fact, 7.7 x 10'° dollars are given per year by the 250 million U.S. citizens. Find the dollars given per citizen (to the nearest dollar). Use scientific notation.

3. A worker's basic hourly wage is $10, but she receives one and a half times her hourly rate for any hours worked in excess of 40 per week. If her paycheck for the week is $595, how many hours of overtime did she work?

4. Some stairs seem easier to climb than others. This is caused by their steepness which is the rise (up) over the run (tread). Find the angle (to the nearest tenth of a degree) of stairs that have a rise of 5 inches and a run of 6 inches.

5. Our forefathers made some great purchases as our United States grew from the 13 original colonies. The 1803 Louisiana Purchase from France was made for 15 million dollars, this included 8.28×10^5 square miles. Using scientific notation, find the cost per square mile to the nearest dollar.

6. A whale has a mass of 1.0×10^5 kg. A flee has a mass of $3 \times i \, o \sim^4 kg$
    What is the ratio of the mass of the whale to that of the flea?

7.   Given the graph shown below, find the **_mean_** of the ages (to the nearest tenth of a year).

Ages of U.S. Women Basketball
Players, 1992 Summer Olympics

a-

23   24   26   26   27   21   21

8.   If the real estate company receives 6% commission, and the broker receives 57% of that company's commission, how much does the broker receive when he sells a house for $105,900?

9.   Within 24 hours in 1916, the temperature in Browning, Montana, fell from 44 degrees to -56 degrees. How large a drop in temperature was this?

SCORECARD Related Technical Math

Items Evaluated	Possible Points									
Written Test	1000									
Résumé Penalty	0 or -10 only									
Clothing Penalty	0 to -50									
Total Possible Points	1000									

Date: _____

Judges' Signatures: _____   _____

_____   _____

_____   _____