

Senior Mathlete Competition Proctor Information

Sprint Round Directions

Be sure you use a new sheet of paper for this round and write your name at the top. In this round you will read a math expression in words and find the correct way to write the expression using either Nemeth Code or UEB Math/Science Code. Only write the problem number and the letter for the correct answer. You will receive one point for each correct answer. If you braille an answer incorrectly, space and braille the correct answer. Only your last answer will be scored. You will be allowed exactly 20 minutes for this round. Please stop when I indicate that your time is up.

You Solve It Round Directions

Be sure you use a new sheet of paper for this round and write your name at the top. In this round, you need to not only read the problems correctly, but you must solve them using the order of operations. Remember to start with parentheses, then go to exponents, then multiplication and division, then addition and subtraction. Write the problem number and the answer to that problem. There are no decimals or fractions in the correct answers. You will receive two points for each correct answer. If you braille an answer incorrectly, space and braille the correct answer. Only your last answer will be scored. You will be allowed exactly 20 minutes for this round. Please stop when I indicate that your time is up.

You Write It Round Directions

Be sure you use a new sheet of paper for this round and write your name at the top. For this round, listen carefully to the expressions and braille what you hear in Nemeth Code or UEB Math/Science Code. Be sure to number your problems. I will pause at certain times throughout the expression to give you time to write. We will begin with me reading the entire problem before you begin to braille. I will read the expression up to 3 times as needed. For multiplication, you can use any multiplication sign. This round will last approximately 30 minutes. You will receive one point for each correct answer. If you braille something incorrectly, rebraille the problem number and the entire correct math expression on a new line.

1. Negative open fraction <pause> seven over three <pause> close fraction

$$-\frac{7}{3}$$

2. The measure of angle A <pause> is greater than <pause> forty-five degrees.

$$m\angle A > 45^\circ$$

3. The square root of one hundred

$$\sqrt{100}$$

4. Three cubed minus two <pause> plus the absolute value of negative four.

$$3^3 - 2 + |-4|$$
5. Negative open parenthesis <pause> negative five squared plus three close parenthesis <pause> open parenthesis two to the third power minus seven close parenthesis

$$-(-5^2 + 3)(2^3 - 7)$$
6. Open absolute value x close absolute value <pause> minus six open parenthesis <pause> fifty plus twelve close parenthesis

$$|x| - 6(50 + 12)$$
7. The square root of x minus two end root

$$\sqrt{x - 2}$$
8. Open absolute value two minus the square root of five end root close absolute value

$$|2 - \sqrt{5}|$$
9. The square root of y squared end root

$$\sqrt{y^2}$$
10. The square root of y end root squared

$$\sqrt{y}^2$$
11. Triangle ABC <pause> is congruent to <pause> triangle DEF.

$$\triangle ABC \cong \triangle DEF$$

12. Fifteen minus three squared plus four
<pause> open parenthesis nine minus eight
close parenthesis <pause> minus the square
root of two times eight end root <pause>
plus one hundred

$$15 - 3^2 + 4(9 - 8) - \sqrt{2 \cdot 8} + 100 \text{ or}$$

$$15 - 3^2 + 4(9 - 8) - \sqrt{2 \times 8} + 100$$

13. The absolute value of x <pause> is less than
<pause> open absolute value x minus 2
close absolute value.

$$|x| < |x - 2|$$

14. The fifth root of negative thirty-two

$$\sqrt[5]{-32}$$

15. Open fraction seven x to the fifth power
<pause> times four y to the sixth power
over <pause> x to the third power times y
squared close fraction

$$\frac{7x^5 \cdot 4y^6}{x^3 \cdot y^2}$$

16. The measure of angle DEF <pause> equals
<pause> seventy degrees.

$$m\angle DEF = 70^\circ$$

17. Negative three y cubed <pause> plus five y
squared <pause> minus four y minus 6
<pause> equals zero.

$$-3y^3 + 5y^2 - 4y - 6 = 0$$

18. Twenty-two times four <pause> times one fourth <pause> plus three open parenthesis <pause> thirty-five minus thirty-four close parenthesis <pause> plus the absolute value of negative seven

$$22 \cdot 4 \cdot \frac{1}{4} + 3(35 - 34) + |-7|$$

19. x equals <pause> open fraction negative b plus or minus <pause> the square root of b squared minus <pause> four a c end root over <pause> two a close fraction.

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

20. The square root of open fraction <pause> forty-nine y to the sixth power over <pause> one hundred twenty-one z to the eighth power close fraction end root

$$\sqrt{\frac{49y^6}{121z^8}}$$

Relay Round Directions

Be sure you use a new sheet of paper for this round and write your name at the top. For the relay round, you will see variables. Find what each variable equals.

Look at these three problems:

$$a = 50 \div 5$$

$$a + 12 = b$$

$$c = 2b$$

Step 1: Find the value of a by dividing 50 by 5.
The value of a is 10.

Step 2: Substitute the value of a into the next problem to get $10 + 12 = b$.

Step 3: Find the value of b by adding 10 and 12.
So the value of b is 22.

Step 4: Substitute the value of b into the next problem, $c = 2b$. Since a number and a variable next to each other means multiplication, you get $c = 2$ times 22.

Step 5: Find the value of c by multiplying 22 by 2.
So, the value of c is 44.

You will keep taking the answer you get in one problem and use it in the next problem, all the way to z !

You may get a decimal, fraction, or negative number, but if numbers are getting really messy, you may want to go back and check your previous answers. You will receive one point for each correct answer. If you braille an answer incorrectly, space and braille the correct answer. Only your last answer will be scored. You will be allowed exactly 30 minutes for this round. Please stop when I indicate that your time is up.