ASSESSMENT - EXPRESSIONS O'CLOCK



Make a clock that is at least 8.5 inches in diameter on cardstock (optional). The hours on the clock must be an expression (that you create using the criteria below) that is equal to the hour of where that expression is located on the clock when solved correctly.

Example: The expression located at the top of the clock (in the 12^{th} hour spot) must equal 12 when solved. $6 \cdot 2 = 12$ hence $6 \cdot 2$ is in the 12 spot.

The Order of Operations **ALWAYS** apply. Be creative and follow instructions carefully. Double check the math to make sure it works. Have fun and be creative! Use what you have learned so far!

Each expression must contain the following for each hour:

- **Hour 1**: at least 3 different numbers & 2 different operations.
- **Hour 2**: at least 3 different numbers, 2 different operations, & parenthesis.
- **Hour 3**: at least 3 different numbers & 2 operations- an exponent & subtraction.
- **Hour 4**: at least 3 different numbers (at least 1 negative) & 2 operations- multiplication & subtraction <u>OR</u> division & addition.
- **Hour 5**: at least 3 different numbers (at least 1 negative) & 2 operations- multiplication & addition <u>OR</u> division & subtraction.
- **Hour 6**: at least 4 different numbers (at least 2 negatives) & 3 different operations
- **Hour 7**: at least 4 different numbers & 3 operations- division, addition, & a different operation
- **Hour 8**: at least 4 different numbers & 3 operations- multiplication, subtraction, & a different operation
- **Hour 9**: at least 4 different numbers (at least 1 negative), 3 different operations, & parenthesis
- Hour 10: at least 4 different numbers (at least 1 negative), 3 different operations, & an exponent
- Hour 11: at least 4 different numbers & 3 different operations, parenthesis, & an exponent
- Hour 12: at least 4 different numbers (at least 1 fraction) & 3 different operations

*YOU CANNOT USE THE HOUR IN THE EXPRESSION. (For example, "2" may not be used in the expression for the 2 o'clock hour.

*Zero may be used a **MAXIMUM** of three times on the entire clock.

Assessement: Expressions O'Clock Work

Hour	Criteria	Solve (Show EACH step)
1	 3 different numbers 2 different operations Must equal 1	
2	 3 different numbers 2 different operations Parenthesis Must equal 2 	
3	 3 different numbers Exponent & Subtraction Must equal 3	

4	 3 different numbers At least 1 negative Multiplication & Subtraction OR Division & Addition Must equal 4 	
5	 3 different numbers At least 1 negative Multiplication & Addition OR Division & Subtraction Must equal 5 	
6	 4 different numbers At least 2 negatives 3 different operations Must equal 6 	

7	 4 different numbers 3 operations (Division, Addition, & a different operation) Must equal 7 	
8	 4 different numbers 3 operations (Multiplication, Subtraction, & a different operation) Must equal 8 	
9	 4 different numbers At least 1 negative 3 different operations Parenthesis Must equal 9 	

10	 4 different numbers At least 1 negative 3 different operations Exponent Must equal 10 	
11	 4 different numbers 3 different operations Parenthesis Exponent Must equal 11 	
12	 4 different numbers At least 1 fraction 3 different operations Must equal 12 	