Activity: Five 2s

Example 1: Use five threes to make the number 20.

Solution:

8 =

10 =

11 =

13 =

$$33 \div 3 + 3 \cdot 3 = 11 + 9 = 20$$

Example 2: Use five threes to make the number 3.

Solution:

$$3+3-3-3+3=3$$

Problem: Use five twos to make expressions resulting in numbers from 0 to 26. The digit 2 must be written five times in each expression. You cannot use any other digits. You can use the following operators: $+, -, \cdot, \div$, exponents, and brackets.

Note: Some of the numbers have multiple solutions. All of the numbers except 13 and 26 can be made without using brackets. The number 17 requires use of exponents.

0 = 14 =

1 = 15 =

2 = 16 =

3 = 17 =

4 = 18 =

5 = 19 =

6 = 20 =

7 = 21 =

9 = 23 =

12 = 26 =

What other numbers could you make out of five twos?

What is the largest number you can make using five twos?

22 =

24 =

25 =