How many different ways can you get to all the numbers between 0 and 20 by using only four 4's?

- You can use any operation, and you must use all four 4's in those operations to get a sum, quotient, difference etc. that is between 0 and 20.

- The goal is to get as many numbers as you can.

For example: a. \(4 \times 4 \times 4 \times 4 = 16\) (now someone has reached 16)
\(b. 4 \times 4 \times 4 - 4 = 8\) (now 8 has been reached)

1. 11.
2. 12.
3. 13.
5. 15.
6. 16.
7. 17.
8. 18.
9. 19.
10. 20.
Battle of the Fractions

1. Split a deck of cards among all players.
2. Each player turns over their top two cards.
3. The smallest number is the numerator, the largest number is the denominator.
5. The player with the greatest fraction wins all four cards.
6. If the fractions are equivalent, the cards are placed in the center. The winner of the next hand takes the center pile as well.
7. Play continues until all cards are played or until time is up.
8. The player with the most cards is the winner.
TARGET GAME
(FRONT)

Object of the Game:
To get as close to the target number as possible and thereby winning the most points.

Materials Needed:
Four dice and a score sheet.

Instructions:
Roll two dice and multiply those numbers together.
Roll a third dice and add that number to the product of the first two dice. The total becomes the "TARGET."
Roll a fourth dice.
Using the numbers on the dice, players try to get as close to the target number as possible. (Any math operation can be used.) Each die can be used only once. All die must be used.
The player who gets closest to the "TARGET" gets a point. The first player to reach ten points wins.

GAME VARIATIONS:

LEVEL ONE:
ONLY USE ADDITION AND SUBTRACTION

LEVEL TWO:
FOLLOW THE RULES ABOVE

LEVEL THREE:
USE HIGHER NUMBER DICE.

PLAYER ONE    PLAYER TWO
Number talk

Using the dot pattern number sheet included-pass one out to everyone and then place one under the doc camera. (dot pattern can be obtained from youcubed under math lessons for the beginning of the year.)

Begin with the question; what do you see?

Once you have some basic observations, ask “is there a pattern?”-let students and adults show the patterns by stepping up to the screen, using a pointer and showing the patterns to everyone. Model wait time