Day 4 (July 5, 2013)

Private think time:

What mathematical questions are on your mind?

What insights have you enjoyed making?

Share at your tables *after* private think time.

Your responses:

- Is there an easy way to figure out the numerator in the probability of the which of pairs that have gcd = 1?
- Abundant number = all the proper factors add up to more than the number itself
  We noticed that the prime numbers have a higher proportion, and abundant numbers have a lower proportion. Do they eventually all hit the same proportion?
- Short term randomness vs long-term predictability
- Want to find a better, non-recursive way to find the #of dots
- Want a better working model for Problem #10 on Day 4
- Is there a connection to the golden ratio?
- The "worst" number--30? Is there a connection between the proportion and this worst number?
- Does the flipping of the coins relate to common factors?
- Problem #10 on Day 4
- What is the prob of string of length s in c coin flips?
- Enjoyed using numbers to back up our gut feeling or using numbers to be reckless!
- Can we make a non-recursive function to the find the number of dots for any staircase of height n?
- Is there a connection between common factors, heads and tails, and binary representation of heads and tails?
- Enjoyed how expandable (simple yet complicated) the questions were and that is something we might want to think about in our own classes.
- How we can use symmetry to make some calculations more elegant? Staircase problem. 2s and 4s have the exact same pattern.