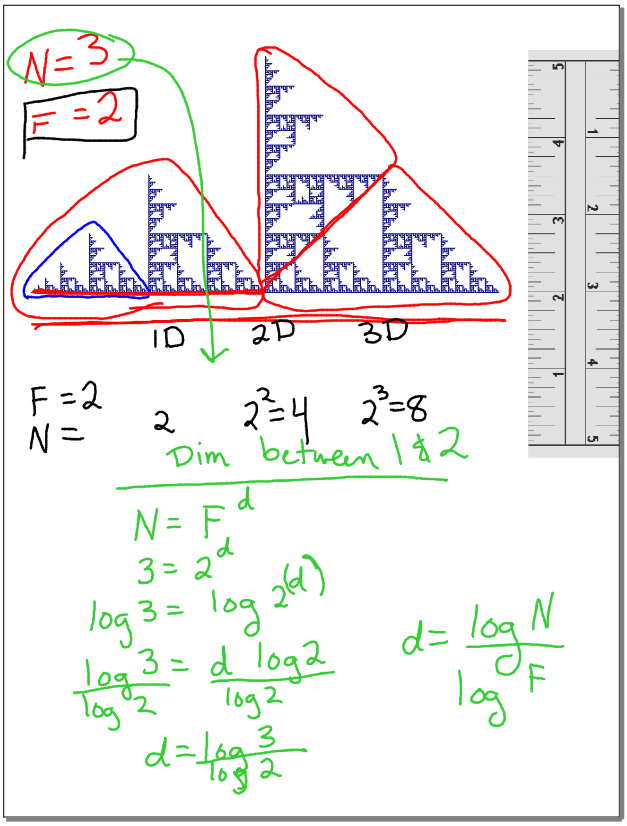
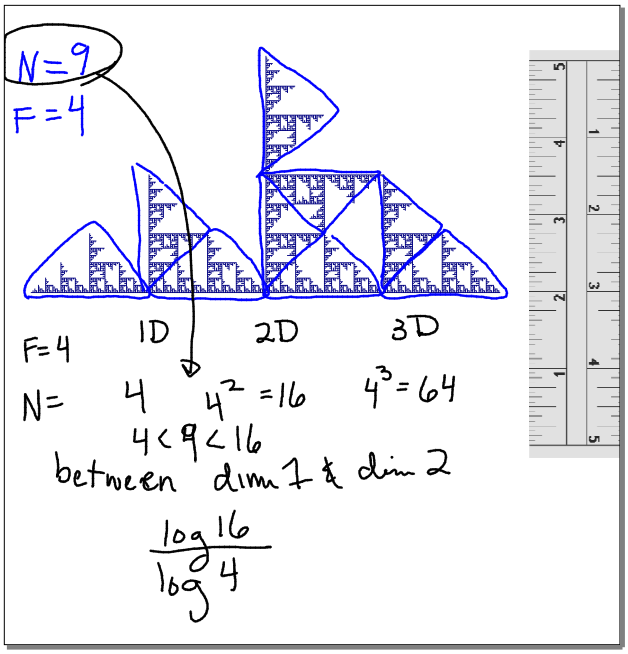
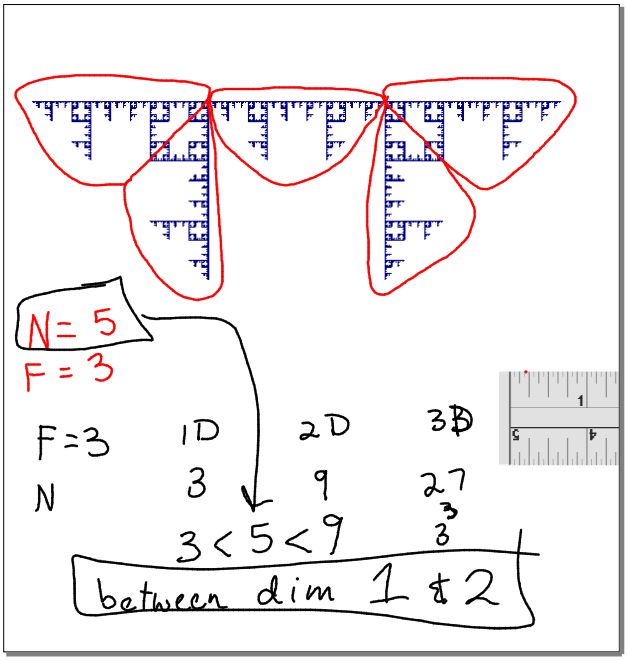


Oct 20-12:33 PM



Oct 20-12:33 PM



Oct 20-1:03 PM

Probability

Birthday # days in yr 365
people in group 6

P(2 have same birthday)
= 1 − P(all different B-days)
$= 1 - \frac{365}{365} \cdot \frac{364}{365} \cdot \frac{363}{365} \cdot \frac{362}{365} \cdot \frac{361}{365} \cdot \frac{360}{365}$
(1) (2) (3) (4)

Oct 20-1:09 PM

Dice 20 sided
People 6 people
P(all #s are different)
P(2 the same) = 1−
P(all different) = $\frac{20}{20}\cdot\frac{19}{20}\cdot\frac{18}{20}\cdot\frac{17}{20}\cdot\frac{16}{20}\cdot\frac{15}{20}$
= .436
P(2 the same) = 1 − .436
= .564

Oct 20-1:16 PM

Dice 20 sided
People 6 people
P(someone rolls a 4) = 1 −
P(no one rolls a 4)
P(no 4's) = $\frac{19}{20}\cdot\frac{19}{20}\cdot\frac{19}{20}\cdot\frac{19}{20}\cdot\frac{19}{20}\cdot\frac{19}{20}$
= $(\frac{19}{20})^6$ = .735
P(someone rolls 4) = 1 − .735
= .265

Oct 20-1:16 PM

$P_{n+1} = 2P_n(1-P_n)+P_n$ $P_0 = .3$

$P_1 = .72$

$P_2 = 2(.72)(1-.72)+.72$

$f(z) = z\cdot z + .2i$ $z_0 = 0$

$= 0 + .2i$ $z_1 = .2i$

$f(z) = z\cdot z + .2i$

Oct 20-1:31 PM