

perplexity.

Cool

BrianMiller at 15:37 PM, 10 Sep 2011 via web

just seeing how this works!

Abby at 15:38 PM, 10 Sep 2011 via web

hello from the nonagon table

Scott Farrar at 15:38 PM, 10 Sep 2011 via web

Rad!

Joe at 15:38 PM, 10 Sep 2011 via web

Test...

Awais at 15:38 PM, 10 Sep 2011 via web

Hi From the Pentagons

Peter at 15:38 PM, 10 Sep 2011 via web

Hello from Octagon Table

Pam at 15:38 PM, 10 Sep 2011 via web

HI from the Triangles table!

Jen at 15:38 PM, 10 Sep 2011 via web

yoyoyo

katie waddle at 15:38 PM, 10 Sep 2011 via web

hello from decagon table

Sadie E. at 15:39 PM, 10 Sep 2011 via web

Another from a second Octagoner (is the  
a word?)

marge at 15:39 PM, 10 Sep 2011 via web

we are reserved-agons, but not so  
reserved.

Abby at 15:39 PM, 10 Sep 2011 via web

hey hey

Jamie at 15:40 PM, 10 Sep 2011 via web

Hi from the Quadrilaterals!

Elizabeth at 15:40 PM, 10 Sep 2011 via web

I MUST know what's under the black splotch!

Mike at 15:42 PM, 10 Sep 2011 via web

wow. I didn't even notice that splotch until you mentioned it.

Peter at 15:43 PM, 10 Sep 2011 via web

gooooo reserved-agnons! :)

Avi Z at 15:50 PM, 10 Sep 2011 via web

Anyone know how to get on his google doc?

Mike at 15:52 PM, 10 Sep 2011 via web

nonagon idea: how about circumference... easiest to measure with tape measure?

Scott Farrar at 15:53 PM, 10 Sep 2011 via web

weight?

Peter at 15:53 PM, 10 Sep 2011 via web

was it a single roll or no?

Mike at 15:57 PM, 10 Sep 2011 via web

i think that is not important, because if we can find it for one roll, it would be easy for multiple rolls.

Peter at 15:58 PM, 10 Sep 2011 via web

did anybody get about 2000?

Joe at 16:04 PM, 10 Sep 2011 via web

we got 1929.17

Joe at 16:05 PM, 10 Sep 2011 via web

1928.08

Mike at 16:09 PM, 10 Sep 2011 via web

Did people just forget about this?

Bryan Davis at 16:09 PM, 10 Sep 2011 via web

i got 1929.07

Peter at 16:19 PM, 10 Sep 2011 via web

hmm pretty big ticket roll, but if you're housing a million people....

Mike at 16:19 PM, 10 Sep 2011 via web

if you guys dont have a calculator and you are familiar with mathematica syntax, go to wolframalpha.com

Peter at 16:20 PM, 10 Sep 2011 via web

1,000,000 fix = not gonna fit in a sedan.

Mike at 16:27 PM, 10 Sep 2011 via web

tix\*

Mike at 16:27 PM, 10 Sep 2011 via web

googles calculator is also sweet just type into the search box

katie waddle at 16:27 PM, 10 Sep 2011 via web

Nope... but a flatbed would work well. Just hele-lift it!

Mike at 16:29 PM, 10 Sep 2011 via web

Perplexing: How many bartenders to make a million mojitos?

Mike at 16:32 PM, 10 Sep 2011 via web

this girl is really smart

Peter at 16:33 PM, 10 Sep 2011 via web

we did the circumference thing!

Abby at 16:34 PM, 10 Sep 2011 via web

I got about 3.8 m for the diameter of a roll of a million tickets.

Bryan Davis at 16:34 PM, 10 Sep 2011 via web

Jennifer did an awesome job.

Bryan Davis at 16:34 PM, 10 Sep 2011 via web

I agree for sure. Great for a Precalc class

Liz Padilla at 16:35 PM, 10 Sep 2011 via web

I'd like to ask questions but i don't completely understand the method.

Peter at 16:35 PM, 10 Sep 2011 via web

second peter's comment. I don't have a question, but I have an uneasy feeling. need to play w/ method before I feel good about it.

Bree at 16:37 PM, 10 Sep 2011 via web

Yeah... I started estimating for the 1 mil ticket roll. Got about 4m diameter

Mike at 16:37 PM, 10 Sep 2011 via web

We used the circumference method too. It's all about finding the # of tix in the outter/inner circle and finding the # of "tix layers"

Avi Z at 16:37 PM, 10 Sep 2011 via web

Can we arrive at a Tickets per ring

function? Without assuming it is an arithmetic sequence?

Scott Farrar at 16:40 PM, 10 Sep 2011 via web

The back of team reserv-agon had a cool trapezoid thing going on!

Abby at 16:40 PM, 10 Sep 2011 via web

I'm thinking that because the thickness of a ticket is finite, a series MUST be used.

Mike at 16:49 PM, 10 Sep 2011 via web

the way I'm thinking about tickets per ring is that the equation for circumference is  $2\pi r$ , which is kind of like  $6r$ , so no matter which  $r_i$

katie waddle at 16:49 PM, 10 Sep 2011 via web

$dr = .22\text{mm}$

Mike at 16:49 PM, 10 Sep 2011 via web

that got cut off

katie waddle at 16:50 PM, 10 Sep 2011 via web

blah I hate twitter

katie waddle at 16:50 PM, 10 Sep 2011 via web

you can't take  $dr \rightarrow 0$

Mike at 16:50 PM, 10 Sep 2011 via web

(#tix series?)  $\pi \cdot \sum(d_i + 2t_t(n-1), n, 1, \text{layer\_max}) / t_l$

Scott Farrar at 17:04 PM, 10 Sep 2011 via web

$d_i$  initial diameter.  $t_t$  ticket thickness.  $n$  ring.  $t_l$  ticket length.

Scott Farrar at 17:05 PM, 10 Sep 2011 via web

million ticket roll, I think I got something like a diameter of 40 meters.

Josh at 17:16 PM, 10 Sep 2011 via web

3.8 meters. Solve the equation for area

Peter at 17:17 PM, 10 Sep 2011 via web

support the 3.8 answer with 3.78752... and backed up with circumference method

shaluck at 17:19 PM, 10 Sep 2011 via web

how do you use the circumference method to go out to a million?

katie waddle at 17:20 PM, 10 Sep 2011 via web

I got 37.8 m, that looks like it could be a misplaced decimal tho...

Bree at 17:21 PM, 10 Sep 2011 via web

see Scott Farrar's formula below... you need to know the number of layers in the huge roll (8608 layers)

shaluck at 17:21 PM, 10 Sep 2011 via web

@kate We found a linear relationship. Therefore, at ~2000 tix and a circumference of ~530mm you could use a ratio

Avi Z at 17:21 PM, 10 Sep 2011 via web

having a little trouble with the fast kids="bright" kids that's going on here.

Bree at 17:34 PM, 10 Sep 2011 via web

in order from best to worse, i like 1, 2 and

then 3

Peter at 17:37 PM, 10 Sep 2011 via web

did anyone work on their own during the working period? if so, did dan push you to check in with others?

katie waddle at 17:39 PM, 10 Sep 2011 via web

I'm totally with you, Bree!

Abby at 17:39 PM, 10 Sep 2011 via web

worked on my own. no push. shared with others later.

Bree at 17:39 PM, 10 Sep 2011 via web

wondering about kids without friends who went into the working period with no idea how to start...

katie waddle at 17:40 PM, 10 Sep 2011 via web

sure. At a middle school level I'd probably superficially impose a format for kids to work together.

Abby at 17:42 PM, 10 Sep 2011 via web

I would also probably provide structure for all of my students at all grade levels. I know I still need that as an adult. :)

Lizzie at 17:44 PM, 10 Sep 2011 via web

can't you randomly generate groups?

Peter at 17:44 PM, 10 Sep 2011 via web

Abby, just mid school? I've had some 9th graders who need extra structure...

Bree at 17:44 PM, 10 Sep 2011 via web

Just that I haven't taught outside mid for a while... I forget what those oldsters need! :-)

Abby at 17:46 PM, 10 Sep 2011 via web

I wouldn't randomly generate the groups

Mike at 17:47 PM, 10 Sep 2011 via web

I use my seating chart to make them.

Mike at 17:47 PM, 10 Sep 2011 via web

Make sure there is only one or two "smart kids" for every 3-4 "struggling kids"

Mike at 17:48 PM, 10 Sep 2011 via web

I pretty much only do random groupings.

Bree at 17:49 PM, 10 Sep 2011 via web

i think problems like this can really mess with who is the "smart" kid and who is the "struggling" kid - don't assume anything!

katie waddle at 17:49 PM, 10 Sep 2011 via web

Abby, I'm back in mid after a ~4 yr hiatus. It's good to be back!

Bree at 17:50 PM, 10 Sep 2011 via web

thinking about how this would be different with physical ticket rolls

Avery at 17:52 PM, 10 Sep 2011 via web

did something similar with TP a few years ago. Had the TP, didn't have the measurements. We took some



measurements, but not all the 1s D had

Bree at 17:54 PM, 10 Sep 2011 via web

We were talking about TP back here. TP is engaging!

Abby at 17:56 PM, 10 Sep 2011 via web

Would compress-ability of the TP make a difference in results?

Abby at 17:59 PM, 10 Sep 2011 via web

Abby - it would to Mr. Whipple :)

Kevin D at 18:01 PM, 10 Sep 2011 via web

yes. one of the challenges w/ TP was compressability. we wound up eventually unrolling it, and once you've done that, no going back!

Bree at 18:02 PM, 10 Sep 2011 via web

i'm sorry. Lost our conversation. What does TP stand for?

Peter at 18:06 PM, 10 Sep 2011 via web

toilet paper

Bree at 18:07 PM, 10 Sep 2011 via web

We are having trouble getting an act 1 that asks the right question... anyone?

Abby at 18:47 PM, 10 Sep 2011 via web

we are finding act 2 more problematic. mainly due to not wanting to give formula & reduce to plug-and-chug problems.

Bree at 18:52 PM, 10 Sep 2011 via web

were we supposed to work on act 2?

Peter at 18:59 PM, 10 Sep 2011 via web

we were thinking about act 2 because we wanted the act 1 to go somewhere useful

katie waddle at 19:00 PM, 10 Sep 2011 via web

I am spending too much time off-task. I didn't realize we were only working on act 1.

Bree at 19:01 PM, 10 Sep 2011 via web

i would agree I think finding the right connection between act 1 and act 2 is key also

Sadie E. at 19:13 PM, 10 Sep 2011 via web

we got caught up on the act two also

Sadie E. at 19:13 PM, 10 Sep 2011 via web

if i was to do this in a classroom, i could spend a whole block on one of these examples

Peter at 19:15 PM, 10 Sep 2011 via web

Good question. How many lessons can I realistically start with a "meaty" hook?

Avi Z at 19:15 PM, 10 Sep 2011 via web

yeah, how do you follow-up on a good hook with a good story? don't want to build up to boring-ness.

Bree at 19:15 PM, 10 Sep 2011 via web

totally, peter! And what about wednesdays where we have 45 min

classes?!

Abby at 19:15 PM, 10 Sep 2011 via web

2 years ago: I did 2 of these in the whole year. 1 year ago: I did four. This year my goal is ten.

Scott Farrar at 19:16 PM, 10 Sep 2011 via web

thoughts - are hooks more important for situations with lots of possible solution methods? or ones that don't, and need to be interesting?

katie waddle at 19:16 PM, 10 Sep 2011 via web

I like the idea of using act 1 as a reason why we are learning stuff. And we could come back to it throughout the unit.

Bryan Davis at 19:17 PM, 10 Sep 2011 via web

what if we do a few to hook them then we start getting them applying that to the boring problems?

Sadie E. at 19:17 PM, 10 Sep 2011 via web

Bryan I like that idea as the hook being an "essential question" if you will

Sadie E. at 19:17 PM, 10 Sep 2011 via web

Likewise, what will this typically look like when first implemented?

Vickie at 19:17 PM, 10 Sep 2011 via web

It seems that I could use this 3 act process in introducing a new standard or concept we are covering.

Robert at 19:17 PM, 10 Sep 2011 via web

Follow up on how to apply it...I struggle with disparate skill sets. I had a student miss  $7+3$  when using their fingers.

Josh at 19:17 PM, 10 Sep 2011 via web

I also struggle with time management. How long does it take me to come up with the script for act 1, 2, and 3? And I also have a life at h

Josh at 19:20 PM, 10 Sep 2011 via web

Do we need to summarize the math used to solve the problem as part of act3.

Pam at 19:22 PM, 10 Sep 2011 via web

Anyone have a UC approved non-AP Stats class?

vickie at 19:39 PM, 10 Sep 2011 via web

Pam, I think we should summarize the process, since problem solving is similar even if the context changes.

Peter at 19:58 PM, 10 Sep 2011 via web

Is there a point in the process where we look back at what we learned from the story... develop key points/common mistakes?

BrianMiller at 20:06 PM, 10 Sep 2011 via web

What happens if students are just too intimidated to do anything?

Diana at 20:09 PM, 10 Sep 2011 via web

I think... then you haven't made the problem appropriately engaging

shaluck at 20:16 PM, 10 Sep 2011 via web

Diana I find the students who are usually intimidated are more engaged in the "3act" problems. everyone can guess. Act1 is key: no 'math'

Scott Farrar at 20:16 PM, 10 Sep 2011 via web

removing the "language" aspect helps engage a lot of students

Chuck at 20:18 PM, 10 Sep 2011 via web

Do the combinations from Applebees increase if you wanted 3 sets of "boneless wings"?

Avi Z at 20:47 PM, 10 Sep 2011 via web

(or your satisfaction?)

Avi Z at 20:50 PM, 10 Sep 2011 via web

Avi, what unit are you using to measure your satisfaction? :)

Bree at 20:51 PM, 10 Sep 2011 via web

Avi, i think allowing repetition in the group definitely makes it more challenging. maybe as a sequel?

Peter at 20:59 PM, 10 Sep 2011 via web

this amazon problem is great if you only have a short time. I mean, this problem would take 20 minutes tops

Peter at 21:04 PM, 10 Sep 2011 via web

confused - it's gonna be way over 200, right? so Applebees is right?

katie waddle at 21:06 PM, 10 Sep 2011 via web

they must have changed the ad

Peter at 21:07 PM, 10 Sep 2011 via web

in the bottom left corner: Durian

Peter at 21:42 PM, 10 Sep 2011 via web

would love students to draw the "is it worth it" inequality for the fruit graph

Avery at 21:44 PM, 10 Sep 2011 via web

Running: \*\*Put two finish lines on the video at 20 yards and 40 yards.\*\* Suit gets 3yd headstart. who wins? 5yd headstart. who wins?

Scott Farrar at 21:48 PM, 10 Sep 2011 via web

Act3 is playing the comparison races of Suit v. Jacoby Ford with each head start.

Scott Farrar at 21:49 PM, 10 Sep 2011 via web

you could also ask where Suit would need to start in order to at least tie Jacoby Ford

Avi Z at 21:54 PM, 10 Sep 2011 via web

Thanks for the insight Scott. Was just wondering how people deal with these issues.

Diana at 22:01 PM, 10 Sep 2011 via web

Avi: I like that as an extension. I like the power of the "Who Wins?" question to

begin with.

Scott Farrar at 22:07 PM, 10 Sep 2011 via web

re rating the perplexity of diff. photos/vids. do i just like the ones where i "figured out the right question" or am i actually intrigued?

Avery at 22:31 PM, 10 Sep 2011 via web

i wonder how many times he has said "perplexing"?

Sadie E. at 22:33 PM, 10 Sep 2011 via web

I feel like it's easier to ask a question from a photo. To answer one in a video.

Bree at 22:33 PM, 10 Sep 2011 via web

Sadie, that is a perplexing question!

Jenn at 22:34 PM, 10 Sep 2011 via web

The videos have less uncertainty than the pictures in my opinion

Avi Z at 22:34 PM, 10 Sep 2011 via web

Fewer video in top 5 maybe b/c there were relatively low production value

Pier at 22:34 PM, 10 Sep 2011 via web

Do you have a library of perplexing prompts by subject??

Jenn at 22:35 PM, 10 Sep 2011 via web

Lot to digest. But can start easy. Thanks Dan for a great day!

Robert at 22:36 PM, 10 Sep 2011 via web

This is a lot to think about but worthy

worthy worthy. Thank you, all!

Abby at 22:37 PM, 10 Sep 2011 via web

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