

Puzzle $-i$

Condylarth Puzzle

23 July 2006

Abstract

I present an algorithm to search arbitrary lists in $O(\log n)$ time.

Complete the following scavenger hunt by bringing to HQ items worth a combined value of at least 50 points. Upon completion of the scavenger hunt, or any time thereafter, you may use this “puzzle” to get one (1) free answer to any other (non-meta) puzzle in either round.

Items range in value between 1 and 5 points. Adjectives act to multiply point values: an x -valued item that also satisfies a $\times y$ adjective yields a score of xy points. Bringing an item that fits more than one adjective will cause the adjectives to multiply. Thus if you bring us a Glow Stick (2 points) that is both Squishy ($\times 1.25$) and Wrapped in Bacon ($\times 1.5$) you will get $2 \times 1.25 \times 1.5 = 3.75$ points. However, you cannot use more than three adjectives to describe any one item, and you can only use each item and each adjective once.

At the end of the hunt, a bonus prize will be awarded to the team which accumulates the highest scavenger hunt score.

We may choose to keep *ed items.

Noun List:

One Point Items:

- A roll of painter’s tape
- A jar of peanut butter
- A haiku about Iowa *
- Your team name
- A glow stick

Two Point Items:

- A samurai sword
- A sign telling you to call your parents *
- An origami figure made out of a dollar bill
- A postcard from Seattle
- A stuffed cow

Three Point Items:

- The Book of Mormon
- A watch covered in jelly
- A Washington Park Sign-In Sheet *
- A rock from the Mark-Khor hike. (Needs “proof”) *
- A Jabberwocky

Four Point Items:

- A playbill for The Phantom of the Lecture Hall *
- A class blurb for one of Condylarth’s upcoming classes *
- A 200 word essay on a topic of your choice written either in the Game of Four or The Way of the Prime *
- The answers to next weeks team problem solving *
- An original (mathematical) proof in the form of a limerick. *

Five Point Items:

- The rules (complete with body motions) for BNC-25. (BNC-3 is Bear Ninja Cowboy. Look at relay problems if you are confused. Or ask us.) *
- Someone who is not a part of Mathcamp
- John Conway’s signature (Drew’s hat counts, if you can get it.) *
- Paul’s Keys (Paul likes bribes. Edible bribes.) *
- A character sheet for this year’s IL *

Bonus Adjective List:

- Bouncy ($\times 1.25$)
- Noisy ($\times 1.25$)
- Shiny ($\times 1.25$)
- Squishy ($\times 1.25$)
- Made out of Zome ($\times 1.5$)
- Russian ($\times 1.5$)
- Strangely colored ($\times 1.5$)
- Wrapped in bacon ($\times 1.5$)
- Larger than Dan ($\times 2$)
- Lighter than air ($\times 2$)