

MATHCOUNTS[®] Problem of the Week Archive

Halloween Fun – October 28, 2024

Problems

Bridgette wants to be a princess for Halloween. When she gets to the costume store, she realizes there are many options. There are five different princess crowns, eight different princess dresses, and three different pairs of princess shoes. How many possible combinations are there for Bridgette's princess costume consisting of one crown, one dress and one pair of shoes?

Joseph and Dante went trick-or-treating and came back with A LOT of candy. However, when Samantha, Joseph's little sister, gets back, they find that, not only does she have more candy, but she also has better candy than they do. Samantha agrees to trade some of the candy, but they have to follow her trading rules.

3 Smarties packs = 1 fun-size candy bar

2 Tootsie Pops = 1 Skittles pack

15 candy corn = 1 Smarties pack

5 candy corn = 2 Bit-O-Honeys

3 Tootsie Pops = 1 fun-size candy bar

Based on Samantha's rules, what item is the most valuable?

Based on Samantha's exchange rates above, how many of the least valuable item is required to get one of the most valuable item?