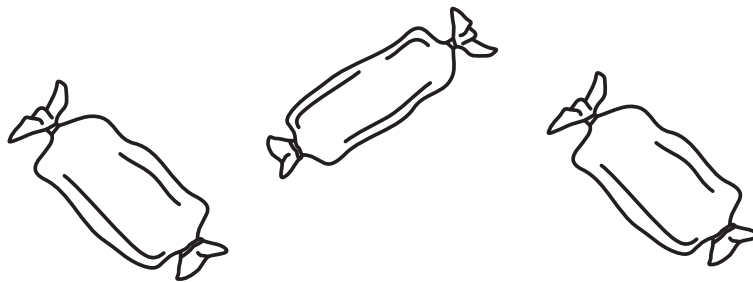




This brainteaser was supplied by the Mathematical Olympiads for Elementary and Middle Schools (www.moems.org).

A bowl contains 75 candies, identical except for color. Twenty are red, 25 are green, and 30 are brown. Without looking, what is the least number of candies you must pick in order to be absolutely certain that three of them are brown?





Solution: 48.

You could pick all of the red candies, of which there are 20, and all of the green ones, of which there are 25, and still not have a single brown candy in your hand. That's already 45 candies. You'll then need to pick three brown ones, giving you a total of 48.

This is the number you must pick to be *absolutely certain* that there are three brown candies. However, it's certainly possible — even likely — that you would have three brown candies if you picked fewer. You just can't be absolutely certain that you'll have three brown ones.