Dear Calculus Student,

I'm eternally in your debt. Your letter came at the most WONDERFUL time! My boss, Daniela Carrylawn, was on the fence about hiring another employee, but your letter convinced her that we could cut cleaning costs and make the hire.

Oooohhh, and what a hire! Justin Lumberpond is absolutely dreamy. His eyes are limpid lakes of profundity. His aura hums -- it absolutely hums, if you know what I mean. Alas, even though we wash our jars of Tahini Meany side-by-side, I'm not sure he notices me.

And yet -- and yet! -- I can tell we were made for one another. So I was hoping that I could put my heart into your hands, and beg you for help one more time. Could you help me say something intelligent to Justin?

You see, the problem is that as soon as I get within sight of him, I go all tongue-tied. I start to stammer and blush, so I just turn away and shut up. He must think I'm a complete idiot, but the truth is that I'm struck speechless. So I want to make sure that the first words I do say make the right impression.

Justin was hired to help with our herbs. He has his own line of them: there's Justin Basil, Justin Oregano, and the most popular Justin Thyme. We package them in little flat paper bags; the bags look like little 4"x8" envelopes. Because they're creased flat at the bottom, the bags often fall over while we're filling them, and so we end up spilling a lot of our herbs.

The other day when a bag of herbs nearly toppled over (but we caught it just in time), Justin muttered something about "These bags need gussets." I looked up "gusset" on the internet, and I realized we could make our own gussets very easily just by folding little triangles off the bottom of the bag. It's just like what you see on brown paper bags from a grocery store!

I've practiced a bunch at home, and figured out how to make them on my own. But I also realized that I don't know how big to make the triangles. If the triangles are very small, the bag is still pretty close to flat, and it doesn't really hold many herbs without bulging out and becoming unstable. If the triangles are too big, then the bag goes flat in the other direction -- same problem. There's got to be a best size to fold the triangles, so that the bag still holds a
lot of herbs while staying mostly in its folded, rectangular shape. So, which size triangles gives us the most space to pack herbs?

I know if I could first show Justin the bags, he'd be so impressed he'd ask me about them, and then I could tell him how I made the bags, and then he'd ask me more questions, and then I could ask him questions . . . it would be the grand beginning to a wonderful romance.

His ex-girlfriend is coming into town on October 22, so I'd really, really love to have the bags started by then -- getting an answer to this by October 21 would be about the latest I could cut it. Any help you could give me would be most desperately appreciated!

Yours devotedly,

Tara Nova
Containment Specialist
Tahini Meany Herbs and Dressings