

Have you learned to love Data Sufficiency yet? If you haven't, you may have complained at least once or twice that Data Sufficiency can be a lot like a high-stakes game of Simon Says:

What is the value of x ?

(1) $x^2 = 16$

(2) $6 < 2x < 10$

Statement 1 *should* be sufficient; x should be 4. But – wait! Simon didn't say "positive", so it's not sufficient. x could be 4 or -4.

Statement 2 *should* be sufficient. x should be 4. But – wait! Simon didn't say "integer", so it's not sufficient. x could be 3.00001 or 4.99999.

So, okay, we get it, Simon, you clever question writer, you. Simon didn't say...but why does that mean I don't get into Harvard? What happens in my on-campus interview, a game of Red Rover or Mother May I? Maybe some wall ball or Kick the Can?

The answer actually lies in Borders. You may have heard this week that Borders Books & Music, once a wildly successful brick-and-mortar retail media store, is going out of business. Borders was a fantastic business not all that long ago, with inviting stores that featured in-store coffee shops and couches, opportunities to browse magazines, read books, participate in discussions with authors and publishers. Borders stores were community meeting places, convenient study locations, and chances to expand your horizons.

Its leadership, however, didn't quite play the game of Simon Says to perfection*. It saw the "integers" of its business clearly – it outpositioned competitors for high-traffic locations, it laid its stores out to invite customers to spend more time in the stores, it pioneered in-store search kiosks to look up obscure titles, it provided excellent, knowledgeable customer service... But it missed the "nonintegers" – those not as obvious threats (or opportunities) that came from outside the "usual suspects". Technology doomed this brick-and-mortar business, as Amazon's Kindle (and later Barnes & Noble's Nook to a lesser extent) murdered in-store sales and Apple's iTunes store and services like Netflix and Redbox did the same for music and DVD sales. Borders owned its in-person, customer-experience space well, but the less-than-obvious threats that it failed to account for did it in.

That's why the GMAT punishes you for failing to notice those not-top-of-mind numbers in Data Sufficiency questions – businesses need those executives who look beneath the surface to assess any and all opportunities or threats. Steve Jobs is a hero; the "noninteger" in his world was the iTunes store. In a computer hardware business, he was essentially competing with Dell, HP, Compaq, Toshiba, and others to sell laptops and desktops (albeit with different operating systems, so he was competing with Microsoft, too), and competing with Samsung and Sony to sell phones and mp3 players. But he saw the noninteger in his distribution chain – people were using his computer to download music and his iPods to use it; why couldn't he own the distribution channel for the music itself? Enter the iTunes store and a fortune in music (and now movie and application) distribution, and exit Borders and companies trying to distribute media in person. Steve Jobs saw the noninteger in his world and won; Borders didn't and lost.

So how do you succeed in the game of Data Sufficiency? Pay attention to and push the borders – use all the available options allowed by the constraints with which the statements try to box you in. Consider the question:

Is $x^2 > 15$?

(1) $x > -4$

$$(2) x^3 < 0$$

Statement 1 is insufficient; x could be something approaching infinity, but it could also be 0; and statement 2 similarly allows for something infinite or something extremely small. Taken together, however, you can note that x is between -4 and 0 . You may immediately think “ -1 , -2 , or -3 ”, none of which would give you an x^2 greater than 15 . But pay attention to the border drawn by the statement. You can go all the way to that border, which is $x > -4$. You could use $x = -3.9999999999999999$ if you want, and the x^2 for that would be a hair’s breadth from 16 . Clearly that would be bigger than 15 , so we still do not have enough information – it could be “yes”, it can clearly be “no”. But it can only be “yes” if you push the border – not quite like Borders but much like Jobs. When the GMAT gives you a statement, it constrains your available options, but to be an effective manager you should push the limits of those borders. Test all the available space you’re given – and the easiest way to do that is to test the borders for new opportunities.

*-Note: This is obviously a simplification to illustrate a point; the good folks at Borders may well have considered these other media sales ventures and calculated that they couldn’t compete in these spheres, or took a calculated gamble that the competition wouldn’t ramp up as quickly as it did. We in no mean to scathe those at Borders, one of our favorite stores – we’re just using current news to demonstrate why the GMAT frames its questions the way that it does. We think the Borders could make for a great sample [Integrated Reasoning](#) problem!