

Re: order on the sets

Source: <http://sci.tech-archive.net/Archive/sci.math/2008-09/msg02683.html>

- *From:* riderofgiraffes <mathforum.org_am@xxxxxxxxxxxxxxxx>
 - *Date:* Mon, 22 Sep 2008 06:59:57 EDT
-

Consider an order on the interval such that
[a,b] is higher than [c,d] iff $b > c$.

If you ask that $[a,b] \leq [c,d]$ iff $b \leq c$, then
you get a particular class of partially ordered
set called a semi-order.

Is $[a,b] \leq [r,s]$ when $b \leq r$ is an (partial) order
for $\{ [a,b] \mid a \leq b \}$?

... it's not reflexive.

However $[a,b] < [r,s]$ when $b < r$ is an irreflexive
order.

My apologies – I mis-spoke myself. I intended to
say $[a,b] < [c,d]$ iff $b < c$, and to use the irreflexive
formulation of partial and semi-orders. Thank you
for your highlighting of the details.

.