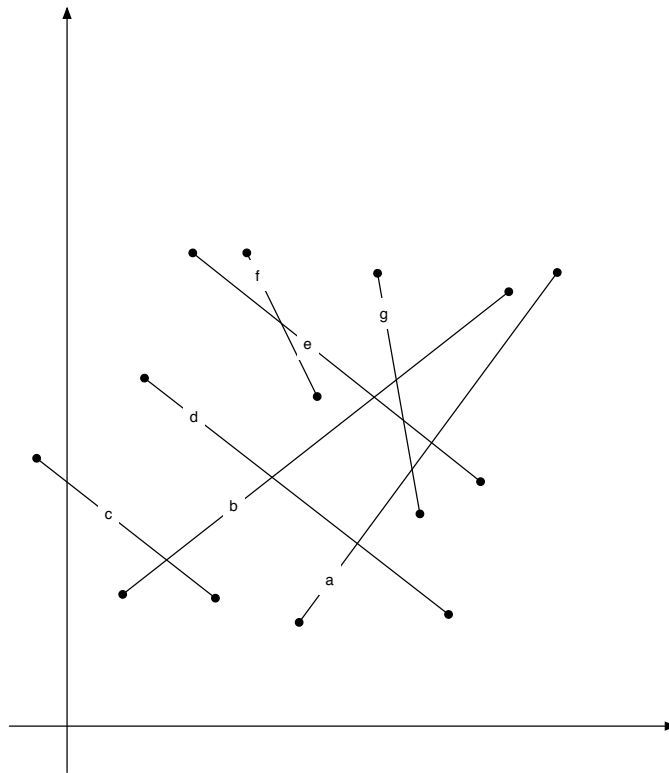


Computational Geometry (csci3250, Laura Toma, Bowdoin College)
 Bentley-Ottman Sweep

Consider the set S of 7 segments shown in the picture below.



Simulate the Bentley-Ottman sweep on S: Show the event queue, the Active Structure AS, and the intersection tests that are performed at every event.

Event	Event Queue	AS	Intersection tests
initially	c1 b1 d1 e1 c2 f1 a1 f2 g1 g2 d2 e2 b2 a2	{}	-
c1	b1 d1 e1 c2 f1 a1 f2 g1 g2 d2 e2 b2 a2	{c}	-
b1	d1 x_{bc} e1 c2 f1 a1 f2 g1 g2 d2 e2 b2 a2	{c,b}	c int b = x_{bc}

