Exercise (Peterson & Davie 5th ed.)

What happens in the spanning tree algorithm if bridge B1 does not participate and:

a) Simply forwards all spanning tree algorithm messages?

b) Drops all spanning tree messages?
All switch tables are initially empty. 

Exercise (Peterson & Davie 5th ed.): 

1. W, X, Y, Z - hosts. B1, B2, B3 - bridges 
2. All switch tables are initially empty. 
3. X sends a message to W. Which bridges learn where X is? Does Y’s network interface see this packet? 
4. The frame is flooded. All the bridges see it, and so does Y’s interface.
Exercise (Peterson & Davie 5th ed.)

- W, X, Y, Z – hosts. B1, B2, B3 - bridges
- All switch tables are initially empty.
- Now, Z sends a message to X. Which bridges learn where Z is? Does Y's network interface see this packet?
- All the bridges know where X is, so the frame is simply forwarded from each bridge on its link to X.
- All bridges learn where Z is.
- Y doesn’t see the frame.

Exercise (Peterson & Davie 5th ed.)

- W, X, Y, Z – hosts. B1, B2, B3 - bridges
- All switch tables are initially empty.
- Y sends a message to X. Which bridges learn where Y is? Does Z's network interface see this packet?
- B1, B2 already know where X is so they are forwarding the frame properly. They learn where Y is.
- Z doesn’t see the frame.

Exercise (Peterson & Davie 5th ed.)

- W, X, Y, Z – hosts. B1, B2, B3 - bridges
- All switch tables are initially empty.
- W sends a message to Y. Which bridges learn where W is? Does Z’s network interface see this packet?
- B3 doesn’t know where Y is, so the frame is flooded by B3. Thus, Z sees the frame.
- When it arrives to B2, who knows where Y is, it is simply forwarded on the link to Y.
- B3 and B2 have learned where Y is.