Question title: Creator of Figure 14.9

The creator of figure 14.9 is (choose one):

1. A mad scientist.
2. An evil scientist.
3. A good professor.
4. A really good professor.
5. Huh?

Question title: Eastward versus Westward

It is impossible to have a Munk-Stommel type frictional boundary layer close the Sverdrup balance circulation in the West.

True False

Question title: Model Creators

Match together the model balances with their creators.

Column preview

Stommel Model	a. A balance between wind stress and beta effect in interior--balance between horizontal friction and beta effect in western boundary current.
Sverdrup Balance	b. A balance between wind stress and beta effect in interior--balance between bottom drag, horizontal friction, and beta effect in western boundary current.
Munk Model	c. A balance between wind stress and beta effect in interior--balance between bottom drag and beta effect in western boundary current.
Munk-Stommel Model	d. An inviscid balance between concentration of streamlines of vorticity and beta effect--only valid in boundary current entry region.
Charney Model	e. A purely inertial model that has no wind forcing or friction, but has 'free modes' with inertial boundary layers.
Fofonoff Model	f. A balance between wind stress and beta effect--invalid in boundary currents.

Question title: Sverdrup Balance

The Sverdrup Balance is a vorticity balance between which two terms:

1. the wind-stress forcing and the beta-term.
2. the vortex stretching and the lateral friction.
3. the time tendency of relative vorticity and the wind stress.
4. the time tendency of relative vorticity and bottom drag.

Question title: Sverdrup Symmetry

The flow given by the Sverdrup balance does not distinguish between a circulation closed in the east and a circulation closed in the west.

True False

Question title: Westward versus Eastward

It is impossible to have a Munk-Stommel type frictional boundary layer close the Sverdrup balance circulation in the East.

True False