Sample problem #7: Managing interest rate risk

The Bogus bank has the following market value asset/liability structure:

Assets $10,000,000  Asset duration (modified) 8.0
Liabilities 9,000,000  Liability duration (modified) 2.0

The bank considers short-selling a T-bond with a modified duration of 10.0 and a price of $125,000.

What is the bank's interest rate exposure?

a) what is the bank equity Price Value of a basis point (PVBP)?

How many (dollar value) T-Bonds should the Bogus bank trade in order to minimize interest rate risk? (Ignoring all other considerations).