Problem of the Week Problem B What's Beneath the Surface?

In each problem below, use the information given about part of the object's mass to determine the unknown mass.

- (a) Contrary to what you may have heard, ostriches do not bury their heads in the sand. But, if one decided to do so just for fun, and its 2000 g head was 2% of its total body mass, then what would be the mass of its entire body, in kilograms?
- (b) Generally, about 90% of an iceberg's mass is below water level. If the mass of the visible portion of a certain iceberg is 50 000 tonnes, then what is the mass of the whole iceberg, in tonnes?
- (c) Only a small portion of a growing mushroom is visible; most of the fungus is below the ground. If 5% of a mushroom is above the ground, and this portion has a mass of 100 g, then what is the mass of the mushroom below the ground, in kilograms?

