Problem of the Week Problem B Rounding Equivalents

Sometimes the process of rounding numbers produces interesting results. For example, if you round the number 39.99 to the nearest ten, you get 40, if you round it to the nearest whole number, you get 40, and if you round it to the nearest tenth, you get 40.0. Notice that you get the same numerical value when rounding 39.99 to the nearest ten, whole number, and tenth.

- (a) Find a number less than 100 with two decimal places such that when you round to the nearest tenth you get the same numerical value as when you round to the nearest whole number.
- (b) Find a number less than 100 with two decimal places such that when you round to the nearest tenth you get the same numerical value as when you round to the nearest ten.
- (c) Find the smallest number between 99 and 100 that has two decimal places that rounds to the same numerical value when you round to the nearest tenth, whole number, ten, and hundred.

