

Practice Quiz 2, M203E

Instructions: The quiz is open book (any books) and open notes (any notes or written material). Each problem is worth 12 points (you get two points free for a total of 50).

[1] (a) What is the remainder if you divide  $323^{11}$  by 9? Show your work or explain how you get your answer.

(b) What is the remainder if you divide  $323^{11}$  by 10? Show your work or explain how you get your answer.

[2] (a) What month will it be 4321 months from now? Explain how you get your answer.

(b) What day will it be 4321 weeks from today, assuming today is Monday? Explain how you get your answer.

[3] (a) Find the postnet check digit for the math department zip code: 68588 0130.

(b) Given that the postnet check digit is 4, fill in the following zip code's missing digit: 12574 3\_11.

[4] (a) Find the check digit (denoted here by x) for the following UPC code:  
0 53000 15108 x.

(b) Find the missing digit in the following UPC code:  
0 15838 \_0001 5.