Divisibility I (continues)

Divisibility by 2, 3, 4, 5, 7, 9, and 11.

Problem 1. How can you quickly determine whether a number is divisible by 2 or by 5? More importantly, why does this work?

Problem 2. How can you reasonably quickly determine whether a number is divisible by 4? Can we do something a bit like what we do for 2 and 5?

Problem 3. How can you quickly determine whether a number is divisible by 3? And, this is harder, why does this work? Is there a similar approach to divisibility by 9?

Problem 4. How can you quickly determine whether a number is divisible by 11?

Problem 5. Now for the hard one, how can you reasonably quickly determine whether a number is divisible by 7? (The approach is related to the approach for 11.)