



9. Which of the following is divisible by 9?

- A $10^{2014} + 5$ B $10^{2014} + 6$ C $10^{2014} + 7$ D $10^{2014} + 8$ E $10^{2014} + 9$

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9. **D** A number is divisible by 9 if and only if its digit sum is divisible by 9. The number 10^{2014} can be written as a 1 followed by 2014 zeros, so this part has a digit sum of 1. Of all the options given, only adding on 8 to this will make a digit sum of 9, so $10^{2014} + 8$ is the required answer.