Quiz 1. *True/False*: The integer 131313 is prime.

Solution. The statement is *false*. We know that an integer N is divisible by 3 if and only if the sum of its digits is divisible by 3. We know that $1 + 3 + 1 + 3 + 1 + 3 = 12$ is divisible by 3. Therefore, 131313 cannot be prime. In fact, $131313 = 3 \cdot 43771 = 3 \cdot 7 \cdot 13 \cdot 37$.