

Can you prove that there is only one set of three consecutive odd numbers which are all prime?

Below is a proof that has been scrambled up. Can you cut up the statements and rearrange them into their original order?

The first number can be written as either $3x$, $3x + 1$, or $3x + 2$ (where x is an integer)	A
Consider a set of three consecutive odd numbers, where the first number is greater than 3	B
All whole numbers (integers) are either multiples of three, one more than a multiple of three, or two more than a multiple of three	C
If the first number is $3x + 1$, the second number will be $3x + 3 = 3(x + 1)$, a multiple of 3, so not prime	D
Therefore, irrespective of which odd number greater than 3 we start with, one of the numbers in our set of three consecutive odd numbers will not be prime	E
If the first number is $3x + 2$, the third number will be $3x + 6 = 3(x + 2)$, a multiple of 3, so not prime	F
If the first number is $3x$, then it cannot be prime, as it must be greater than 3	G