

In Class Exercise - Ambiguous Date

You will team up to solve this problem!

A time traveller visits your team warning you of the end of the world in the 22nd **century** (i.e. **2101 - 2200**). We know that the time traveller will give us three pieces of information.

DD - The day that the end of the world occurs (i.e. 15, the 15th day of some month)

MM - The month that the end of the world occurs (i.e. 09, the 9th month of some year)

YY - The year that the end of the world occurs (i.e. 13, the year 2113)

However, the time traveller's customs are unknown, and we don't know the format of the date he gives us -- we only receive the numbers.

Ambiguity is a property of information that means it can be interpreted more than one way. A piece of information is *Ambiguous* if it can mean more than one thing.

Non-Ambiguous	Ambiguous
<p>For example, if our time traveller tells us that the end of the world is on 08-41-16; we would immediately know that the end of the world is</p> <ul style="list-style-type: none">- 2141, August 16th (MM-YY-DD) <p>The date 08-41-16 is not ambiguous.</p>	<p>In another example, if our time traveller tells us that the end of the world is 01-02-03, we don't know if the end of the world is</p> <ul style="list-style-type: none">- 2101, February 3rd (YY-DD-MM)- 2102, March 1st (DD-YY-MM)- 2103, January 2nd (MM-DD-YY)- ..etc.. <p>The date 01-02-03 is ambiguous</p>

It must be true that the date the time traveller gives us is either ambiguous (there is more than one interpretation) or non-ambiguous (there is only one interpretation).

The question for your group to answer is: When the time traveller gives us the numbers; when can we know the date of the end of the world, and when are we not sure?

i.e: What rules determine if a date is ambiguous or non-ambiguous?