## American Truck and Rail Audits, Inc.

August 2015 Brain Teaser

## Q

You have three boxes of fruit. One contains just apples, one contains just oranges, and one contains a mixture of both. Each box is labeled – one says "apples," one says "oranges," and one says "apples and oranges." However, it is known that none of the boxes are labeled correctly.

How can you label the boxes correctly if you are only allowed to take and look at just one piece of fruit from just one of the boxes?

## A

Take a piece of fruit from the box marked "apples and oranges." Suppose the fruit you take is an apple. Then that box must be the box containing just apples. Therefore, the box marked "oranges" can't be the box containing just apples, and it can't be the box containing just oranges either – so it must be the box containing apples and oranges. The remaining box is therefore the box containing just oranges.

If the fruit you take out is an orange, the solution is derived in a similar fashion: the box marked "apples and oranges" is the box containing just oranges; the box marked "apples" is the box containing both apples and oranges; and the box marked "oranges" is the one containing just apples.

Find the solution for this brain teaser at amtr.com/brain-teasers

