Inventory Picking Locations

The goal of this exercise is to determine from which locations in the warehouse a picker should pick a given product.

For background, here are some definitions:

- **Location.** This is a physical location in a warehouse, usually denoted by an aisle and bin number, where a given product can be stored.

- **Inventory.** This is the quantity of a given product, available at a specified location in the warehouse.

- **Default Unit of Measure.** This is the default quantity of a given product that comes in a standard box. For example: a default unit of measure of 12 means that this product comes pre-packed in boxes of 12 each. When necessary, these boxes can be opened and their units inside sold individually.

Now, when we send a picker in the warehouse to pick a given product, we want to tell them from which locations to pick the product. The rules that determine which locations to pick from are as follows:

1. If possible, we want to always send the picker to the location that has the least amount of inventory. For example: if we're picking 12 units, and we have two locations with 24 and 48 in them, respectively, we should send the picker to the location with 24 units.

2. If possible, we don't want to send the picker to multiple locations. For example: if we're picking 24 units, and we have 3 locations with 12, 12, and 48 in them, respectively, we should send the picker to the location with 48 units.

3. If possible, we don't want to pick individual pieces if the desired quantity is available in closed boxes. For example: if we're picking 24 units, and we have 5 locations with 10, 10, 10, 12, and 12 in them, respectively, we should send the picker to the 2 locations with 12 units in them, instead of to the 3 locations with 10.

The objective is to calculate from which locations the picker should pick the required quantity.
You should return a list of locations and the quantity for each location.

Your implementation should be as efficient as possible, clean and easy to read & understand.

(See the attached C# file for the skeleton code)

```
class PickingLocations
{
    private List<Location> locations;
    private int defaultUnitOfMeasure;

    public PickingLocations(List<Location> locations, int defaultUnitOfMeasure = 1)
    {
        this.locations = locations;
        this.defaultUnitOfMeasure = defaultUnitOfMeasure;
    }

    public List<InventoryToPick> Calculate(int quantityToPick)
    {
        // Implement the logic here
    }
}
```