Issue #16389:

"Size" ignored if placed before fontproperties

Running unit tests:

1. Install the pytest package
   a. python -m pip install -U pip
   b. python -m pip install -U pytest
2. Clone the branch with the bug fix
   - git clone https://github.com/RiazCharania/matplotlib --branch=issue_16389
3. Change the terminal directory to the <u>root of the cloned directory</u>
   - cd matplotlib
4. Run the unit test
   a. python -m pytest
   ./lib/matplotlib/tests/test_artist.py::test_artist_update_fontproperties_priority

Modified files
- From the <u>root of the cloned directory</u>
  o ./lib/matplotlib/artist.py
  o ./lib/matplotlib/tests/test_artist.py

Technical breakdown

By implementing the bug fix, the update(self, props) function in artist.py will now check if "fontproperties" is an argument in props. If so, given that props.items() will return a list-like structure for which the update function iterates through, my fix will place the "fontproperties" argument at the head of the list, ensuring it gets processed first. This will ensure properties (such as "size") set by creating a new default instance of FontProperties will not overwrite any previously set properties, as there will be none. Given that there can only one "fontproperties" argument, the rearrangement of the list only needs to be done once, with the rest of the list keeping its otherwise relative order. If no "fontproperties" argument is found in props, the update function will run unchanged.