

sTEM-at-Work: Puzzle #22 (Cargo Robot Arm Performance Test)

A technician working for a shipyard that retrofits robotic arms for lifting cargo into storage compartments has just completed a computer controlled test of three new robotic arms (purchased from the Robotic Arm Division of the “U-Betch-em” Company) that have just been installed in the vessel cargo compartment. The computer has plotted the voltage verses displacement data for all three arms. The technician knows that the voltage the computer applies to the robotic arm is directly proportional to the force the arm can use to lift an object and that, for the same value of applied voltage, “U-Betch-em” RA-142 is the arm that can do the most work. Now, the Tech must label the computer plots and then print the graph out for the robot arm commissioning report that must be file.

On the graph below, the plot for “U-Betch-em” Robotic Arm RA-142 is labeled correctly. (Yes or No). Submit your answers at www.fl-ate.org



