Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Are you confident that you could:

1. Use vectors to express forces?
   1. Yes
   2. Maybe
   3. No
2. Calculate vector dot and cross products?
   1. Yes
   2. Maybe
   3. No
3. Express the components of a force in 2D on a free body diagram?
   1. Yes
   2. Maybe
   3. No
4. Express the components of a force in 3D on a free body diagram?
   1. Yes
   2. Maybe
   3. No
5. Analyze a system of forces in 2D?
   1. Yes
   2. Maybe
   3. No
6. Analyze a system of forces in 3D?
   1. Yes
   2. Maybe
   3. No
7. Determine the moment of a force about an axis?
   1. Yes
   2. Maybe
   3. No
8. Determine the moment of a force about a line?
   1. Yes
   2. Maybe
   3. No
9. Use mechanical couples to solve a problem?
   1. Yes
   2. Maybe
   3. No
10. Derive equations of mechanical equilibrium in 2D?
    1. Yes
    2. Maybe
    3. No
11. Derive equations of mechanical equilibrium in 3D?
    1. Yes
    2. Maybe
    3. No
12. Recognize statically indeterminate objects?
    1. Yes
    2. Maybe
    3. No
13. Recognize redundant supports?
    1. Yes
    2. Maybe
    3. No
14. Analyze reaction forces in an object?
    1. Yes
    2. Maybe
    3. No
15. Analyze a truss in 2D?
    1. Yes
    2. Maybe
    3. No
16. Analyze a truss in 3D?
    1. Yes
    2. Maybe
    3. No
17. Use static friction to solve a problem?
    1. Yes
    2. Maybe
    3. No
18. Analyze a structure in static equilibrium?
    1. Yes
    2. Maybe
    3. No
19. Design a structure in static equilibrium?
    1. Yes
    2. Maybe
    3. No
20. Use Matlab to analyze mechanics problems?
    1. Yes
    2. Maybe
    3. No
21. Use Solidworks to design mechanical components?
    1. Yes
    2. Maybe
    3. No