

Muscular Fitness Practical Worksheet

Part 1: Perform and Record Your Tests

Complete the following tests and record your results. For **Grip Strength** and **Press-Up Test**, use your ACSM Exercise Testing and Prescription textbook to find normative values and evaluate your performance. For the **Leg-Back Dynamometer**, use the normative table provided below.

Test	Result	Evaluation
Grip Strength (kg)		
Leg-Back Dynamometer (kg)		
Press-Up Test (reps)		

Leg-Back Dynamometer Normative Values (Occupational Health Standards)

Use this table to evaluate your leg-back strength result.

Age Group	Men (kg)	Women (kg)
20–29	135–175	75–105
30–39	130–165	70–100
40–49	120–155	65–95
50–59	110–145	60–90
60+	95–130	50–80

How to Interpret Your Result:

- If your result is **above the upper limit** of the range: Exceptional strength for your age and sex.
- If your result is **within the range and toward the top**: Strong compared to typical norms.
- If your result is **within the range and toward the bottom**: Average or slightly below average.
- If your result is **below the lower limit**: Below expected norms; may indicate weakness or lack of training.

Part 2: Grip Strength Reliability Task

You will be tested by at least 3 different students using the grip dynamometer. Record all readings for your dominant hand.

Tester	Reading (kg)
1	
2	
3	
4 (optional)	

Part 3: Excel Analysis

1. Open Excel and input your grip strength readings.
2. Calculate the **Mean** and **Standard Deviation** using Excel formulas.
3. Interpretation Task:
 - How much variation was there between testers?
 - What might explain this error (e.g., technique, positioning, motivation)?
 - Suggest one way to improve reliability.

Part 4: Reflection

- Which test was easiest to standardize? Which was hardest?
- Why is reliability important in fitness testing?