

Analyzing Muscle Strength

1. Use the table below to answer the following questions.

TABLE 2.1.6: The strength of forearms and hands

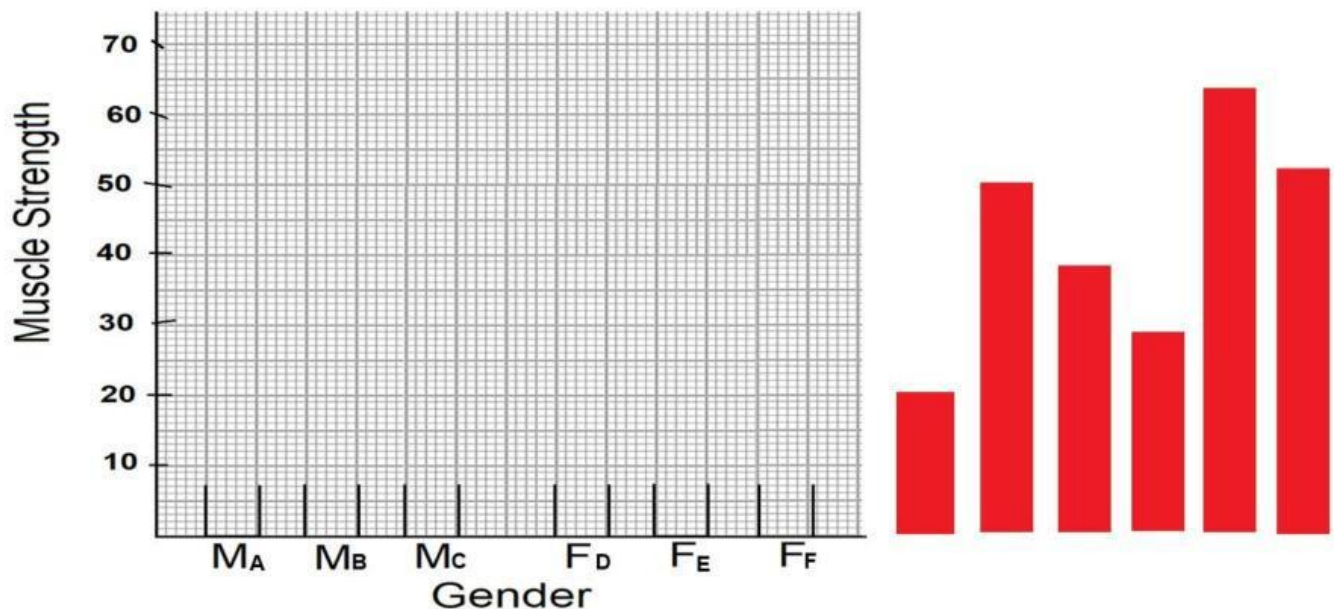
Gender of volunteer	Age	Mass (kg)	Muscle strength (N)
A. Male	20	76	64
B. Male	55	76	50
C. Male	55	87	51
D. Female	20	64	38
E. Female	55	64	28
F. Female	55	76	20

i. How does age affect muscle strength?

ii. How does gender seem to affect muscle strength?

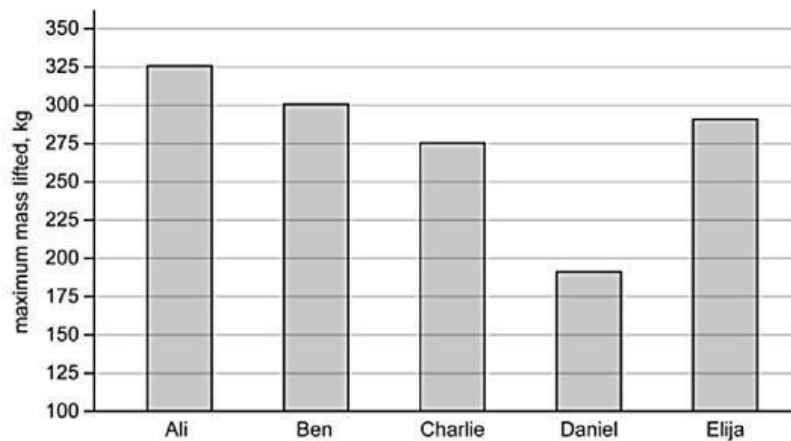
iii. Between age and mass, which affects muscle strength more?

b. Use data on gender and muscles strength from the table above to complete the bar chart below.



2. Use the graph below to answer the following questions.

Five men compared the weights they could lift above their heads.



a. How can you tell from the graph who is strongest?

b. Which man is strongest? _____

c. Which two men are the weakest? _____

d. Which man probably has an injury? _____

e. The men underwent weights training for a month. How would this most likely affect their results?

3. Write the Volunteers in order from **Strongest** to **Weakest**, based on your knowledge learned.

Volunteer 1 Gender: Male Age: 20 Mass: 76 kg 1	Volunteer 2 Gender: Male Age: 55 Mass: 76 kg 2	Volunteer 3 Gender: Male Age: 50 Mass: 87 kg 3
Volunteer 4 Gender: Female Age: 20 Mass: 64 kg 4	Volunteer 5 Gender: Female Age: 55 Mass: 64 kg 5	Volunteer 6 Gender: Female Age: 55 Mass: 76 kg 6

Order: