

Part 2: Post-exercise worksheet

1. Record measurements using the table below at rest and post-exercise.
2. Perform necessary calculations using the Equation provided for calculated variables.
3. Provide a possible explanation to explain any difference between the variable at rest and post-exercise.

Measured CV variable	Rest	Post-exercise
SBP		
Provide explanation for any difference in resting and post-exercise values		
DBP		
Provide explanation for any difference in resting and post-exercise values		
HR		
Provide explanation for any difference in resting and post-exercise values		
Calculated CV values	Rest	Post-exercise
PP		
Provide explanation for any difference in resting and post-exercise values		
SV		
Provide explanation for any difference in resting and post-exercise values		
CO		

Provide explanation for any difference in resting and post-exercise values		
TPR		
Provide explanation for any difference in resting and post-exercise values		

Measured pulmonary variable	Rest	Post-exercise
TV		
Provide explanation for any difference in resting and post-exercise values		
ERV		
Provide explanation for any difference in resting and post-exercise values		
VC		
Provide explanation for any difference in resting and post-exercise values		
Calculated pulmonary variable	Rest	Post-exercise
RV		
Provide explanation for any difference in resting and post-exercise values		
IRV		
Provide explanation for any difference in resting and post-exercise values		
FRC		

Provide explanation for any difference in resting and post-exercise values		
IC		
Provide explanation for any difference in resting and post-exercise values		
T _{vent}		
Provide explanation for any difference in resting and post-exercise values		

1. Did the cardiovascular response to exercise match up with your predicted response? If not, what values were different?
2. Compare SBP, DBP, and MAP between rest and after exercise. Is this what you would have expected? Explain why or why not. Explain the possible mechanisms responsible for any change in values.
3. Compare CO between rest and after exercise. In your response you should describe how stroke volume and heart rate were affected. Is this what you would expect? Discuss factors that affect cardiac output and how these may have changed.
4. How was total peripheral resistance affected by exercise? Is this what you expected? Explain why or why not. Is the change in TPR during exercise consistent with the physiological adjustments being made?
5. How is blood flow distribution affected during exercise? do your values support your findings?

Touch on each organ below specifically:

- Brain:
- Heart:
- Skeletal muscle:
- Digestive system:
- Kidneys:

6. How did pulmonary function change with exercise? Describe the respiratory volumes and capacities at rest and exercise. Did you expect changes between rest and exercise? Explain your findings.

7. What regulatory mechanisms are responsible for the changes in cardiovascular, vasculature, and pulmonary function? Be specific in your response and discuss any receptors and neurotransmitters involved in this response.