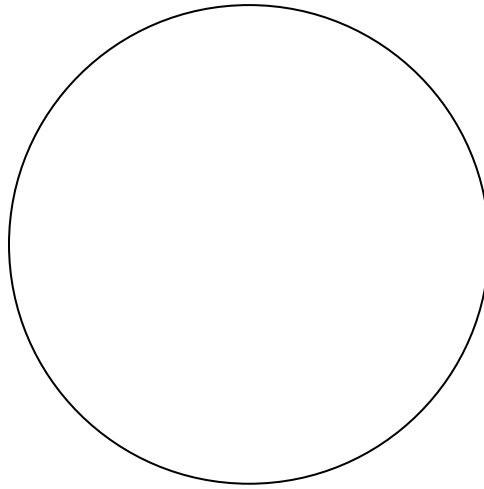


# Physiology of the Heart- Lab

## I. Cardiovascular Structure and Function

A1. Cardiac Review- Make a flow chart of circulation beginning and ending with the right atrium.(no pictures, just words)

B2. Diagram and label Cardiac Muscle (use slide and pg. 393)



C2. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

C3. \_\_\_\_\_  
\_\_\_\_\_

D1. Atrium \_\_\_\_\_  
\_\_\_\_\_

Ventricle \_\_\_\_\_  
\_\_\_\_\_

Aorta \_\_\_\_\_  
\_\_\_\_\_

What is happening to each valve? Why? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## II. Heart Sounds

A3. Auscultation points: \_\_\_\_\_  
\_\_\_\_\_

## III. Pulse

B. Above or Below \_\_\_\_\_

C. Factors Influencing the Pulse Characteristics

Pulse	Rate	Rhythm	Tension	Amplitude
Temporal				
Carotid				

Radial				
Popliteal				
Dorsalis Pedis				

**IV. Blood Pressure**

B7. Blood Pressure = \_\_\_\_\_

What factors might influence blood pressure readings? \_\_\_\_\_

\_\_\_\_\_

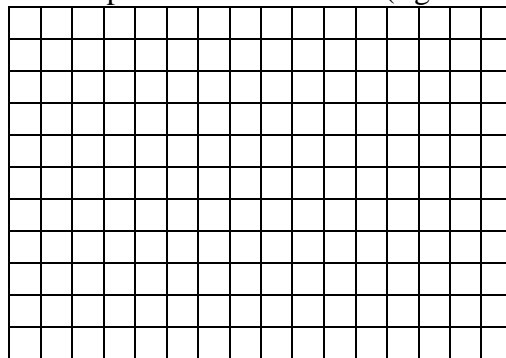
C7. Pulse Pressure = \_\_\_\_\_

What value might there be in knowing pulse pressure? \_\_\_\_\_

\_\_\_\_\_

**F. Exercise and Blood Pressure**

Bar Graph of Blood Pressure (fig. 50-6)



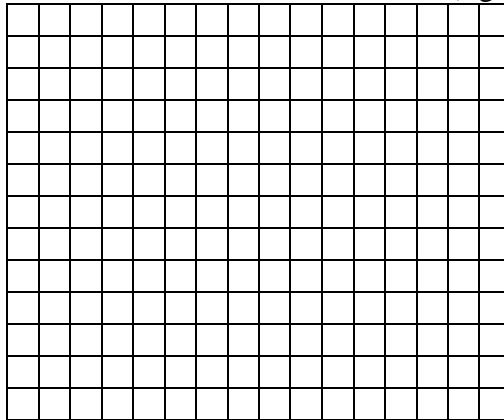
Was your partner's blood pressure back to normal after 3 minutes? \_\_\_\_\_

If not, what factors could account for the difference? \_\_\_\_\_

\_\_\_\_\_

G7. Cold Pressure

Effects of Cold on Blood Pressure (fig. 50-7)



H6. Venous Blood Pressure = \_\_\_\_\_

How does your venous pressure correlate with the information in figure 50-4?

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**V. Cardiovascular Function**

A2. Base Pulse = \_\_\_\_\_

A5. Steps Inning 1 \_\_\_\_\_

Steps Inning 6 \_\_\_\_\_

Steps Inning 2 \_\_\_\_\_

Steps Inning 7 \_\_\_\_\_

Steps Inning 3 \_\_\_\_\_

Steps Inning 8 \_\_\_\_\_

Steps Inning 4 \_\_\_\_\_

Steps Inning 9 \_\_\_\_\_

Steps Inning 5 \_\_\_\_\_

Steps Inning 10 \_\_\_\_\_

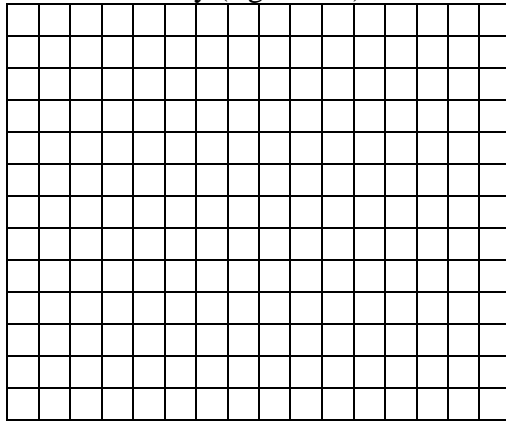
A7. After Pulse = \_\_\_\_\_

4 Min. Pulse = \_\_\_\_\_

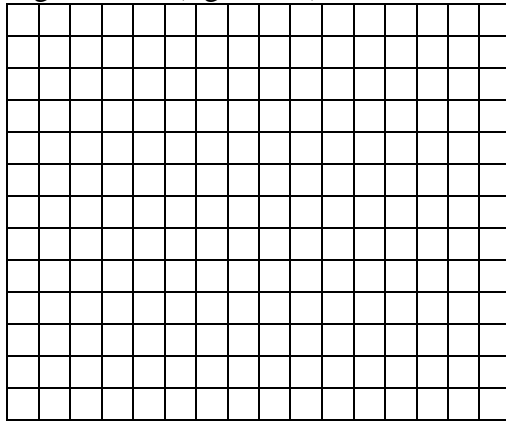
2 Min. Pulse = \_\_\_\_\_

6 Min. Pulse = \_\_\_\_\_

A8. Cardiovascular Efficiency (fig. 50-9a)



B1. General Fatigue Curve (fig. 50-9b)



Does your curve surprise you? Why or why not? \_\_\_\_\_

\_\_\_\_\_

B2. What do you suppose accounts for this dip? \_\_\_\_\_

\_\_\_\_\_

What does it mean if your pulse rate is not back to normal after 6 min? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

How efficient are you compared with your classmates? \_\_\_\_\_

\_\_\_\_\_

Did anything surprise you about this test? \_\_\_\_\_

**General Questions:**

1. What do we mean when we say the heart has two functional syncytia?
2. What is auscultation?
3. How many times per year does your heart beat?
4. In addition to the number of beats per minute, what does a diagnostician check when taking a pulse?
5. Why can the diastolic pressure never be higher than the systolic pressure?
6. Dave's blood pressure is 160/105. What is his pulse pressure?
7. Annie's blood pressure is 170/111. Does she suffer from hypertension? Explain.
8. How does a general fatigue curve demonstrate cardiovascular efficiency?