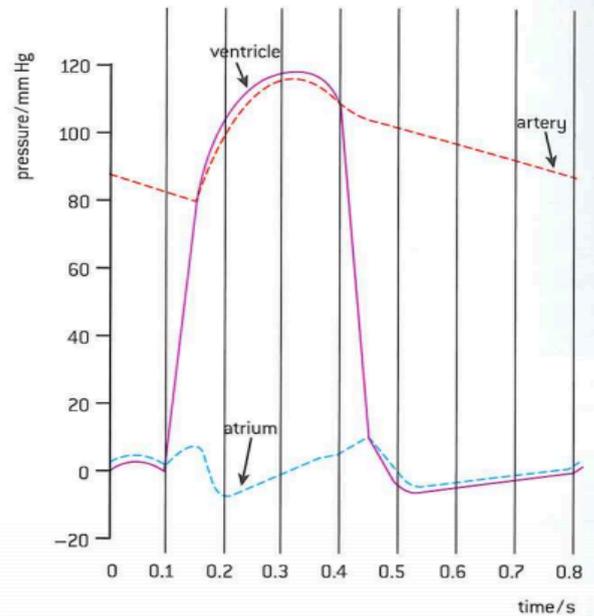


**Table 4: Data-based Question**

**Data-based questions: Heart action and blood pressures**

Figure 15 shows the pressures in the atrium, ventricle and artery on one side of the heart, during one second in the life of the heart.

- 1 Deduce when blood is being pumped from the atrium to the ventricle. Give both the start and the end times. [2]
- 2 Deduce when the ventricle starts to contract. [1]
- 3 The atrioventricular valve is the valve between the atrium and the ventricle. State when the atrioventricular valve closes. [1]
- 4 The semilunar valve is the valve between the ventricle and the artery. State when the semilunar valve opens. [1]
- 5 Deduce when the semilunar valve closes. [1]
- 6 Deduce when blood is being pumped from the ventricle to the artery. Give both the start and the end times. [2]
- 7 Deduce when the volume of blood in the ventricle is:
  - a) at a maximum [1]
  - b) at a minimum. [1]



▲ Figure 15 Pressure changes during the cardiac cycle

1. ....
2. ....
3. ....
4. ....
5. ....
6. ....
7. a. ....
  - b. ....