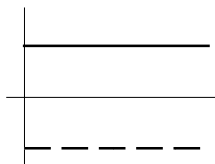




### POSITION vs. CLOCK READING

1.



1.a. Describe the motion depicted by the solid line.

The body is at rest at some positive position.

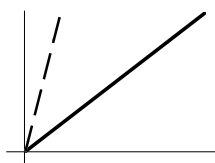
b. How—if at all—is the motion depicted by the dashed line any *different*?

The other body is at rest at some negative position.

c. How—if at all—is the motion depicted by the dashed line *similar*?

Both bodies are at rest.

2.



2.a. Describe the motion depicted by the solid line.

The body is moving in positive space in the positive direction.

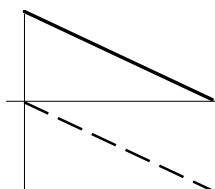
b. How—if at all—is the motion depicted by the dashed line any *different*?

The other body is moving faster.

c. How—if at all—is the motion depicted by the dashed line *similar*?

Both bodies are moving in positive space in the positive direction.

3.



3.a. Describe the motion depicted by the solid line.

The body is moving in positive space in the negative direction.

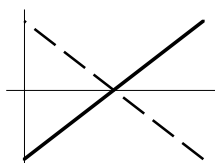
b. How—if at all—is the motion depicted by the dashed line any *different*?

The other body is moving in negative space.

c. How—if at all—is the motion depicted by the dashed line *similar*?

Both bodies are moving in the negative direction.

4.



4.a. Describe the motion depicted by the solid line.

The body is moving from negative space to positive space in the positive direction.

b. How—if at all—is the motion depicted by the dashed line any *different*?

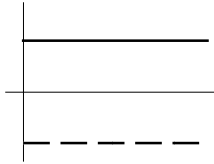
The other body is moving from positive to negative space.

c. How—if at all—is the motion depicted by the dashed line *similar*?

Both bodies are moving with the same speed?

## VELOCITY vs. CLOCK READING

5.



5.a. Describe the motion depicted by the solid line.

The body is moving at constant speed in the positive direction.

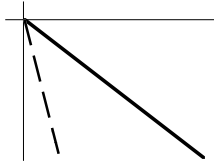
b. How—if at all—is the motion depicted by the dashed line any *different*?

The other body is moving in the opposite direction.

c. How—if at all—is the motion depicted by the dashed line *similar*?

The other body is moving with the same speed.

6.



6.a. Describe the motion depicted by the solid line.

The body is moving with increasing speed in the negative direction.

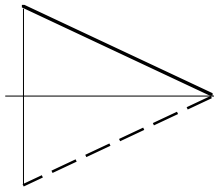
b. How—if at all—is the motion depicted by the dashed line any *different*?

The other body's speed is changing more rapidly.

c. How—if at all—is the motion depicted by the dashed line *similar*?

Both bodies are moving with increasing speed in the negative direction.

7.



7.a. Describe the motion depicted by the solid line.

The body is moving with decreasing speed in the positive direction.

b. How—if at all—is the motion depicted by the dashed line any *different*?

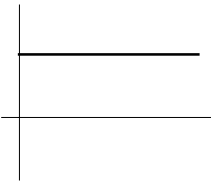
The other body is moving in the negative direction.

c. How—if at all—is the motion depicted by the dashed line *similar*?

Both bodies are moving with decreasing speed; they are both decelerating.

## ACCELERATION AND MORE POSITION VS. CLOCK READING

8.  $a$  vs.  $t$

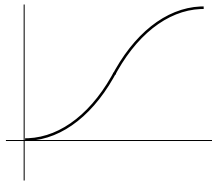


8. Describe two possible motions that this graph could describe.

i. Moving with increasing speed in the positive direction.

ii. Moving with decreasing speed in the negative direction.

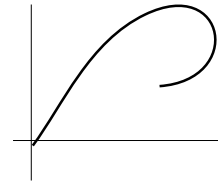
9.  $x$  vs.  $t$



9. Describe this motion.

Body starts at rest, speeds up in positive direction, slows down and comes to a stop.

10.  $x$  vs.  $t$



10. Describe this motion.

This motion cannot occur.