

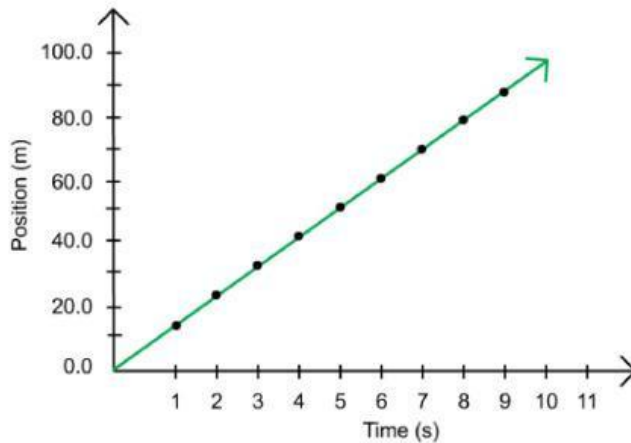
position-time graph

Total questions: 14

Worksheet time: 24mins

Instructor name: Khaled Barhoom

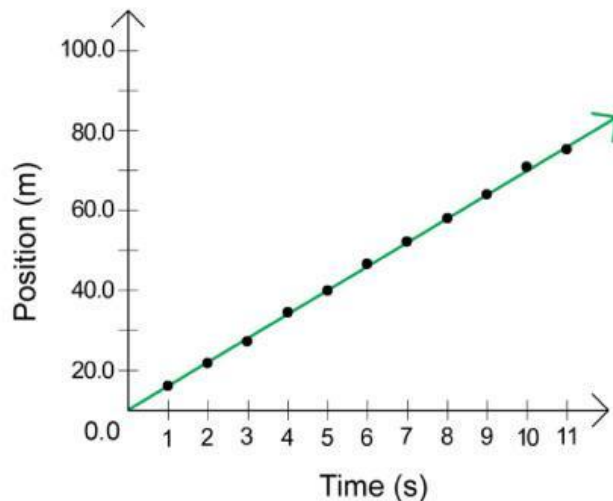
1.



A position-time graph of an athlete winning the 100-m run is shown. Estimate the time taken by the athlete to reach 65 m.

- | | |
|----------|----------|
| a) 6.0 s | b) 6.5 s |
| c) 5.5 s | d) 7.0 s |

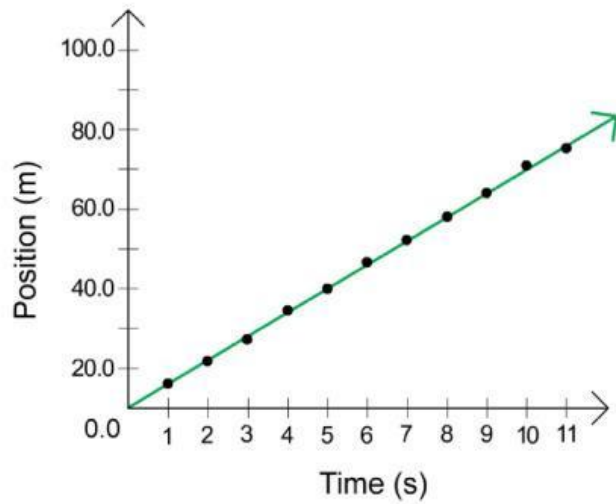
2.



A position-time graph of an athlete winning the 100-m run is shown. What was the instantaneous position of the athlete at 2.5 s?

- | | |
|---------|---------|
| a) 15 m | b) 20 m |
| c) 25 m | d) 30 m |

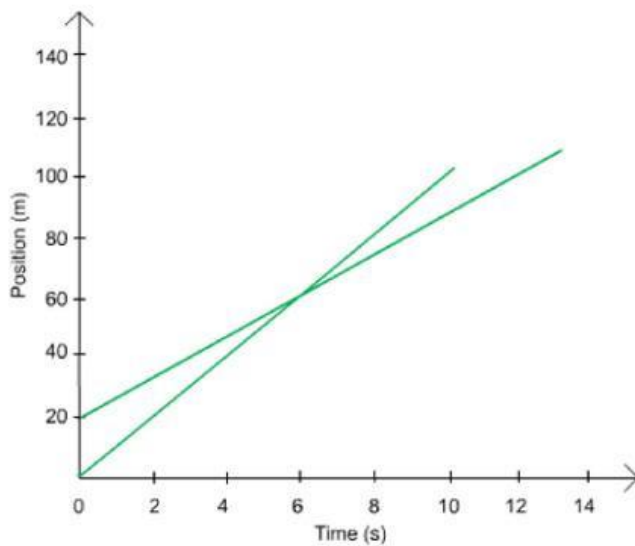
3.



A position-time graph of an athlete winning the 100-m run is shown. What was the instantaneous position of the athlete at 2.5 s?

- | | |
|---------|---------|
| a) 15 m | b) 20 m |
| c) 25 m | d) 30 m |

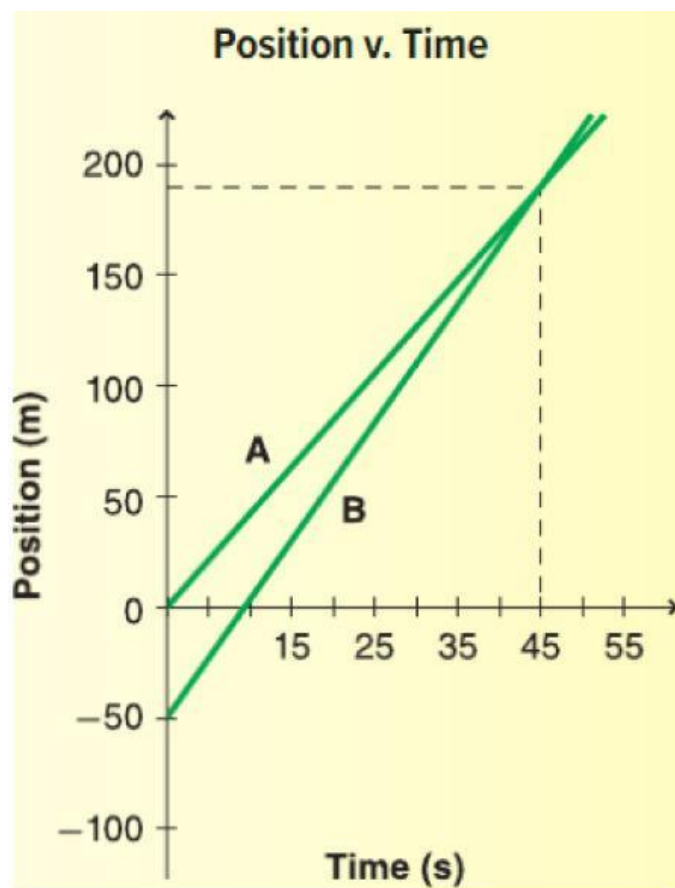
4.



From the following position-time graph of two brothers running a 100-m run, analyze at what time do both brothers have the same position. The smaller brother started the race from the 20-m mark.

- | | |
|--------|--------|
| a) 2 s | b) 4 s |
| c) 6 s | d) 8 s |

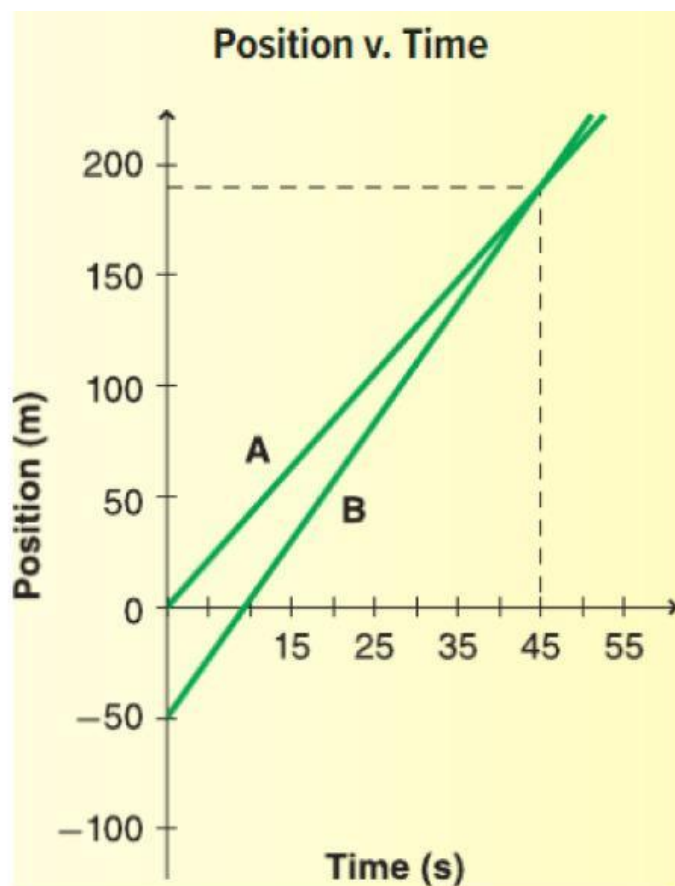
5.



The position-time graph of two runners A and B is given. When does runner B pass runner A?

- a) 40 s
- b) 35 s
- c) 45 s
- d) 50 s

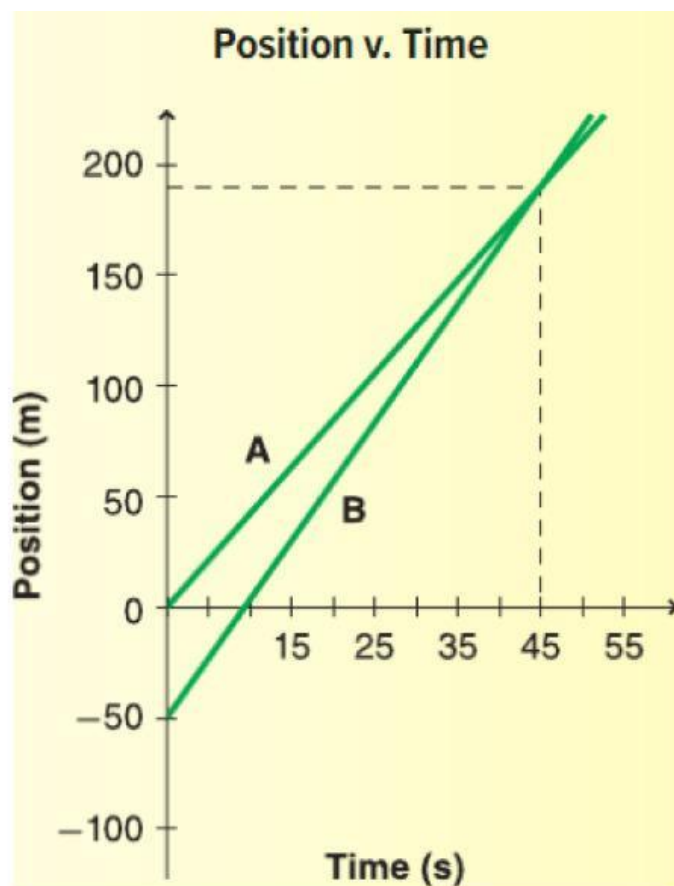
6.



The position-time graph of two runners A and B is given. Where does runner B pass runner A?

- a) 0 m
- b) 100 m
- c) 190 m
- d) 55 m

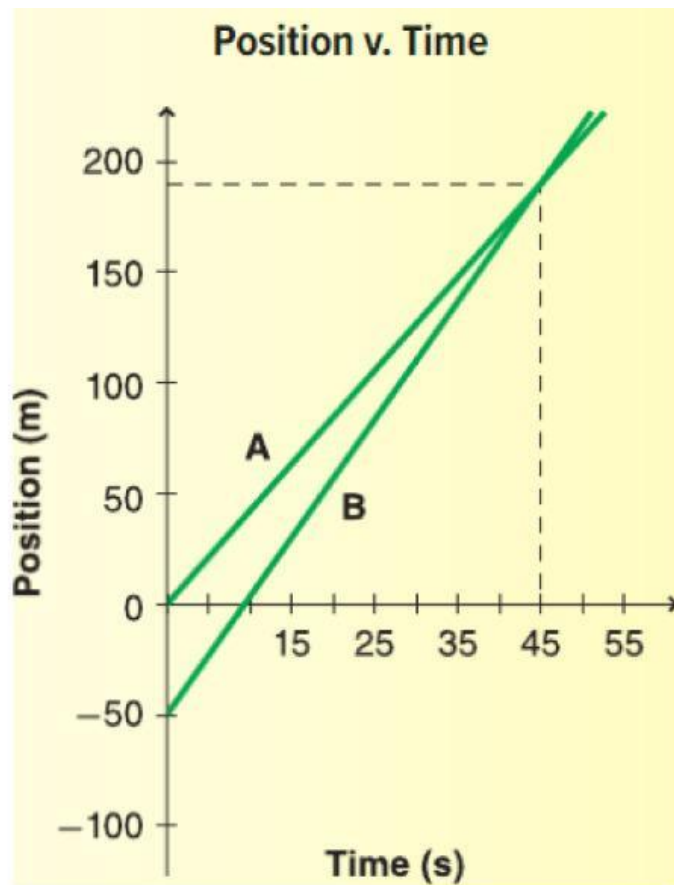
7.



Where was runner A located at $t=0$ seconds?

- a) at origin
- b) at 50 m from origin
- c) at -50 m from origin
- d) at 100 m from origin

8.

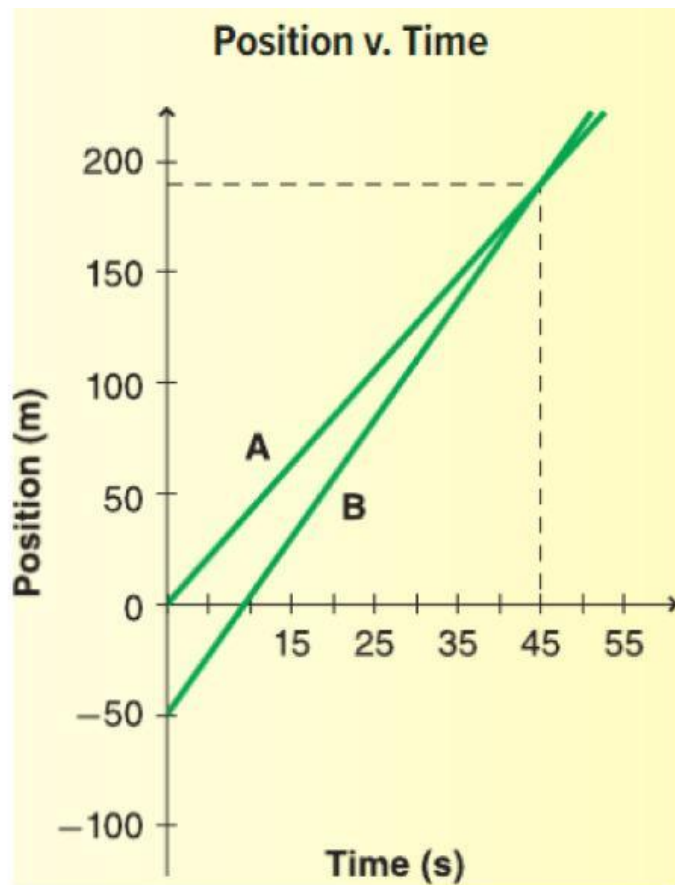


Which runner was ahead at $t=48.0$ s?

a) runner A

b) runner B

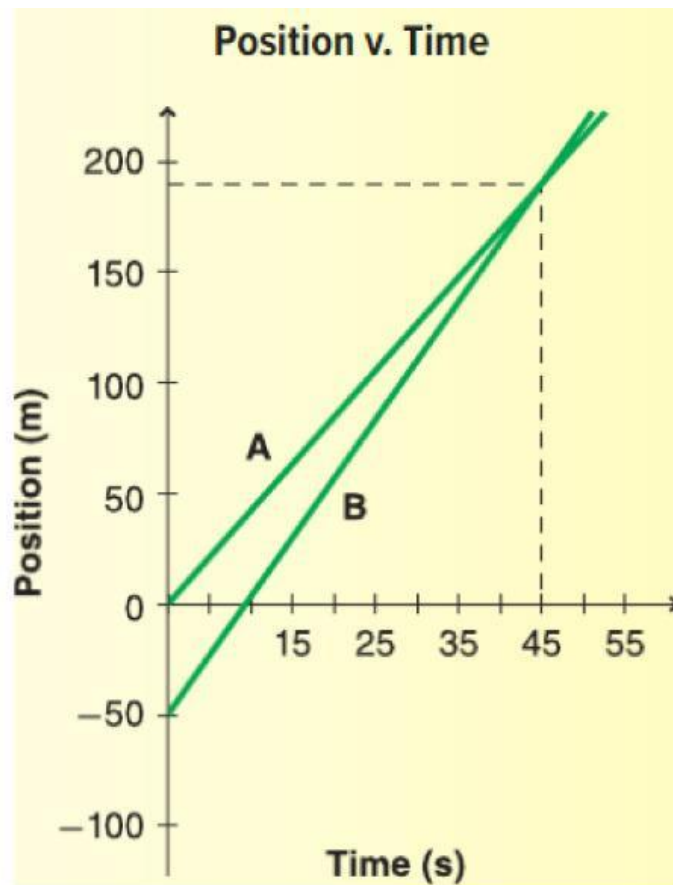
9.



When runner A was at 0.0 m, where was runner B?

- a) 0 m
- b) 50 m
- c) 100 m
- d) -50 m

10.



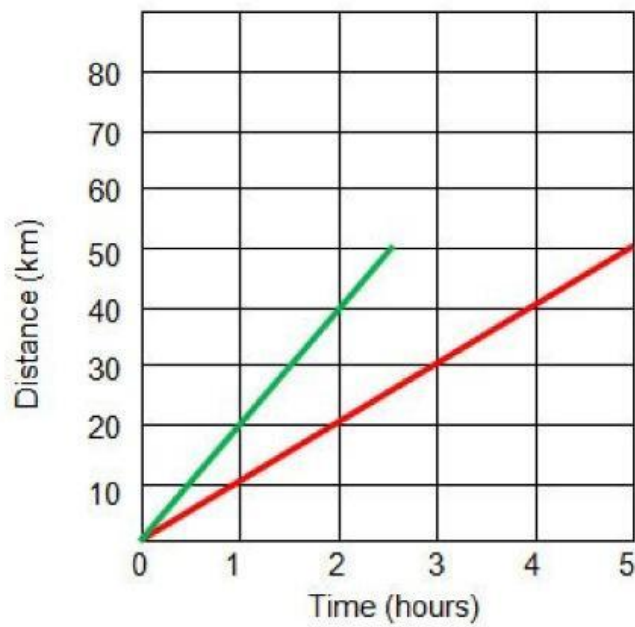
How far apart were runners A and B at $t=20.0$ s?

- a) 10 m
- b) 30 m
- c) 50 m
- d) 70 m

11. Slope of a Position -Time graph gives

- a) Velocity
- b) Displacement
- c) Acceleration
- d) Distance

12.

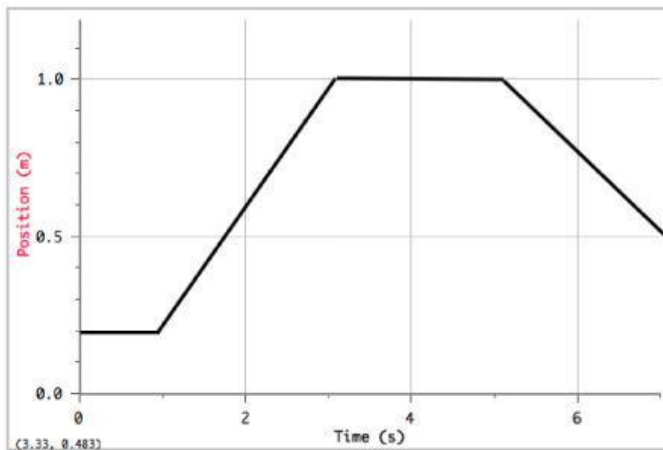


Which line represents the slower speed?

a) green

b) red

13.



from 3rd second to 5th second, the object is

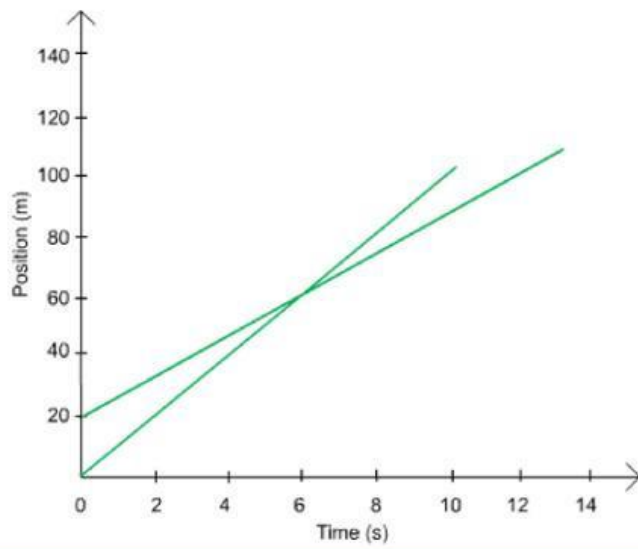
a) moving at a constant speed

b) speeding up

c) not moving

d) slowing down

14.



From the following position-time graph of two brothers running a 100-m run, analyze at what time do both brothers have the same position. The smaller brother started the race from the 20-m mark.

- a) 2 s
- b) 4 s
- c) 6 s
- d) 8 s