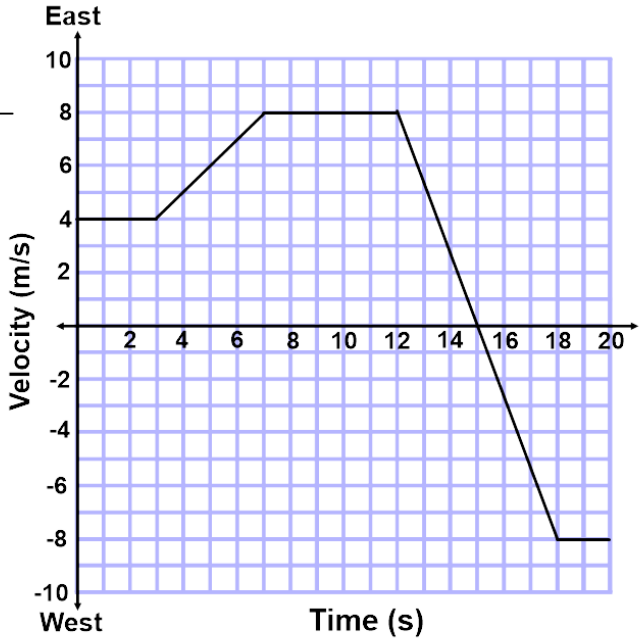
Physics 112: Graphing Practice Questions MC

Answer the following questions based on the given graph.



1. The direction of the acceleration from 3 to 7 seconds is _____
    a. East
    b. West

2. At what time did the direction of the object change?
    a. 3 second mark
    b. 12 second mark
    c. 15 second mark

3. Between 12 and 15 seconds, what is the direction of the velocity and why?
    a. East because the velocity values are positive
    b. West because the slope is negative

4. Did the object travel a further distance east or west and why?
    a. East because of the greater area contained above the time axis
    b. West because the object was traveling west at the end of 20 seconds.

5. During what time interval was the acceleration the opposite direction of the object's motion?
    a. 15 to 18 seconds
    b. 12 to 15 seconds
    c. 3 to 7 seconds

6. Calculate the distance traveled during the first 7 seconds
    a. 56m
    b. 36m
    c. 28m
    d. 12m

7. Calculate the acceleration between 12 and 18 seconds
    a. $-2.67 m/s^2$
    b. $2.67 m/s^2$
    c. $-0.375 m/s^2$
    d. $0.375 m/s^2$

8. Calculate the distance traveled west
    a. -28m
    b. 28m
    c. -40m
    d. 40m