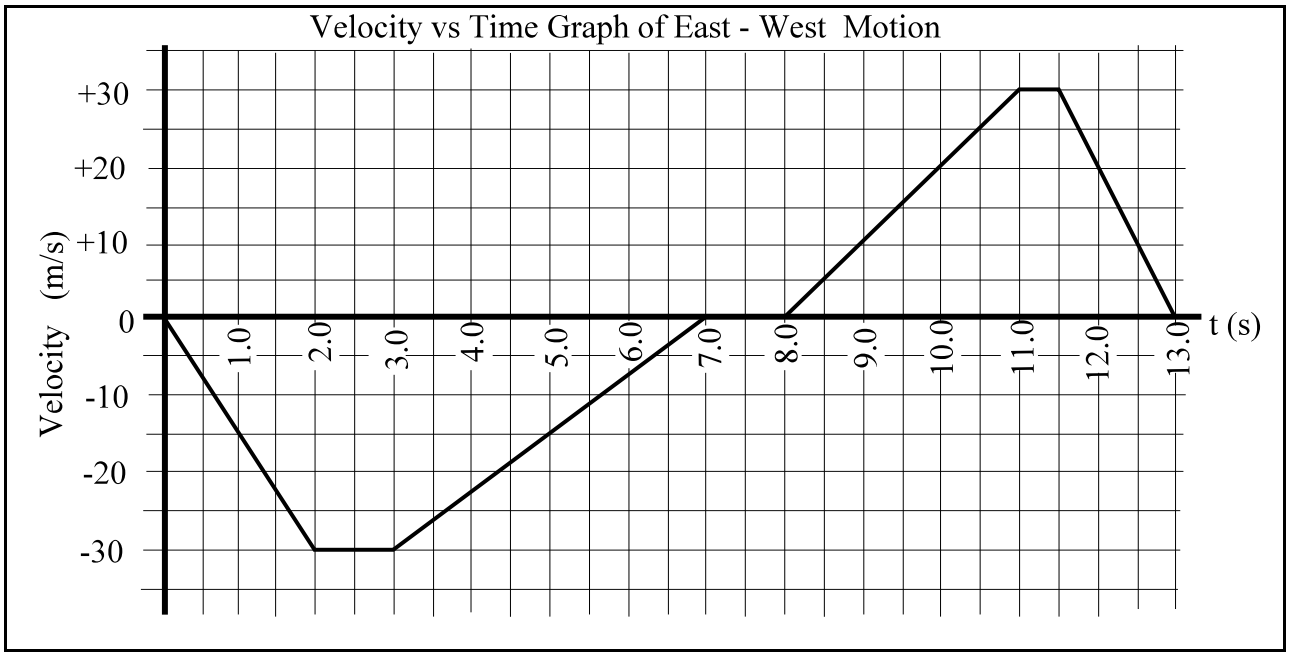
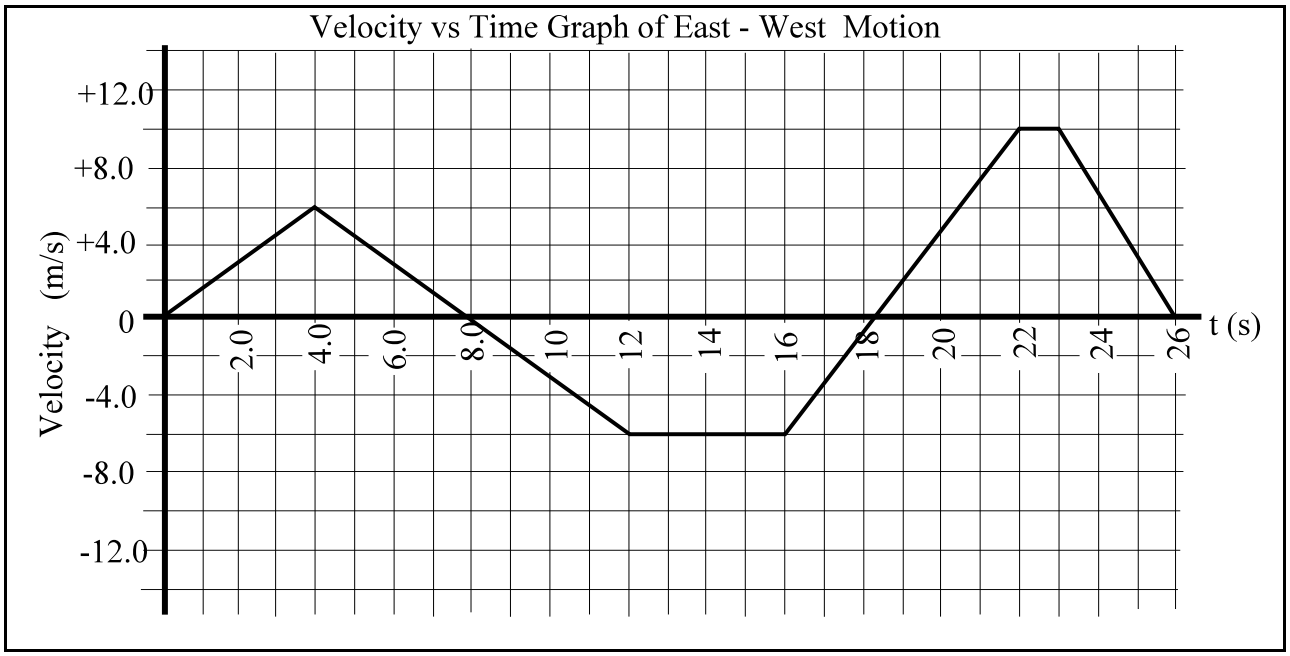
Motion Graph # 5 The following graph indicates the motion of a cart on an East-West path.



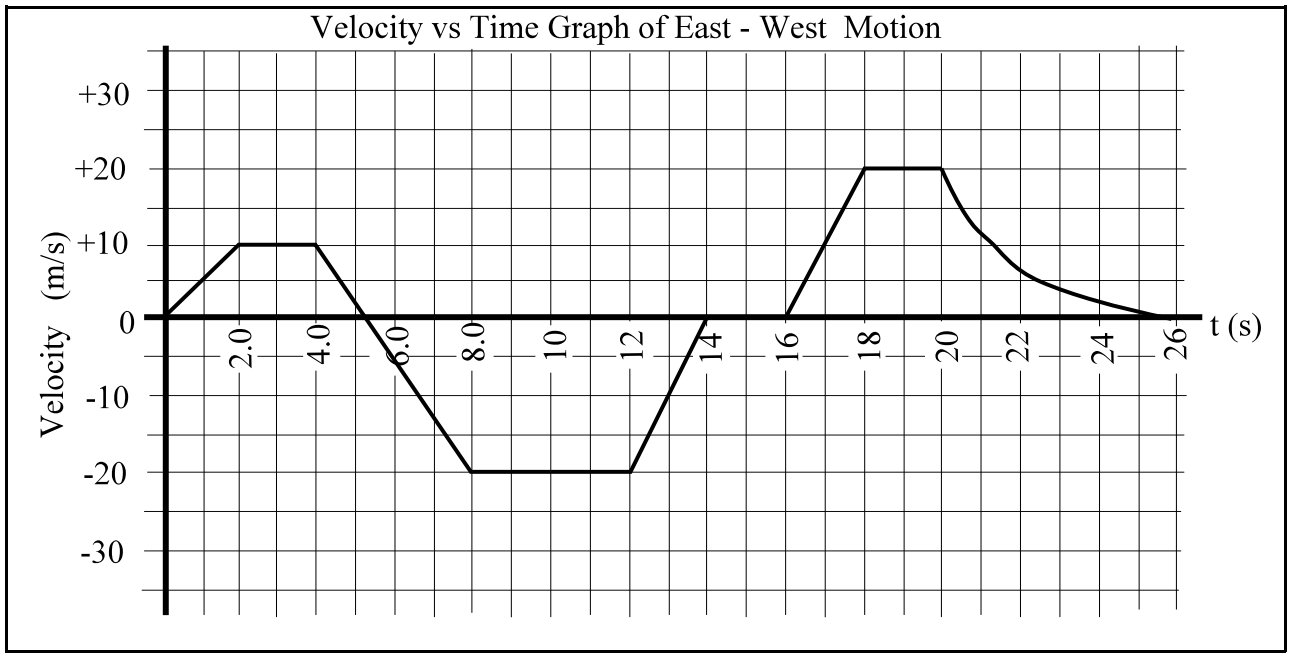
1. What is the cart's maximum velocity? _____
2. What is the velocity of the cart at 5.0 s? _____
3. What is its acceleration at 5.0 s? _____
4. When did the cart have constant velocity? _____
5. When did it have negative acceleration? _____
6. When did the cart have negative velocity? _____
7. What was the displacement of the cart at 3.0 s? _____
8. What distance had it moved by 7.0 s? _____
9. When did the cart first start to travel east? _____
10. What was the cart's total displacement? _____
11. What was the total distance travelled? _____
12. What was the average velocity in the first 13 s? _____
13. What was the average speed in the first 13 s? _____
14. Did the cart ever return to the starting point? _____

Motion Graph # 6 The following graph shows the motion of a cart moving along a straight path.



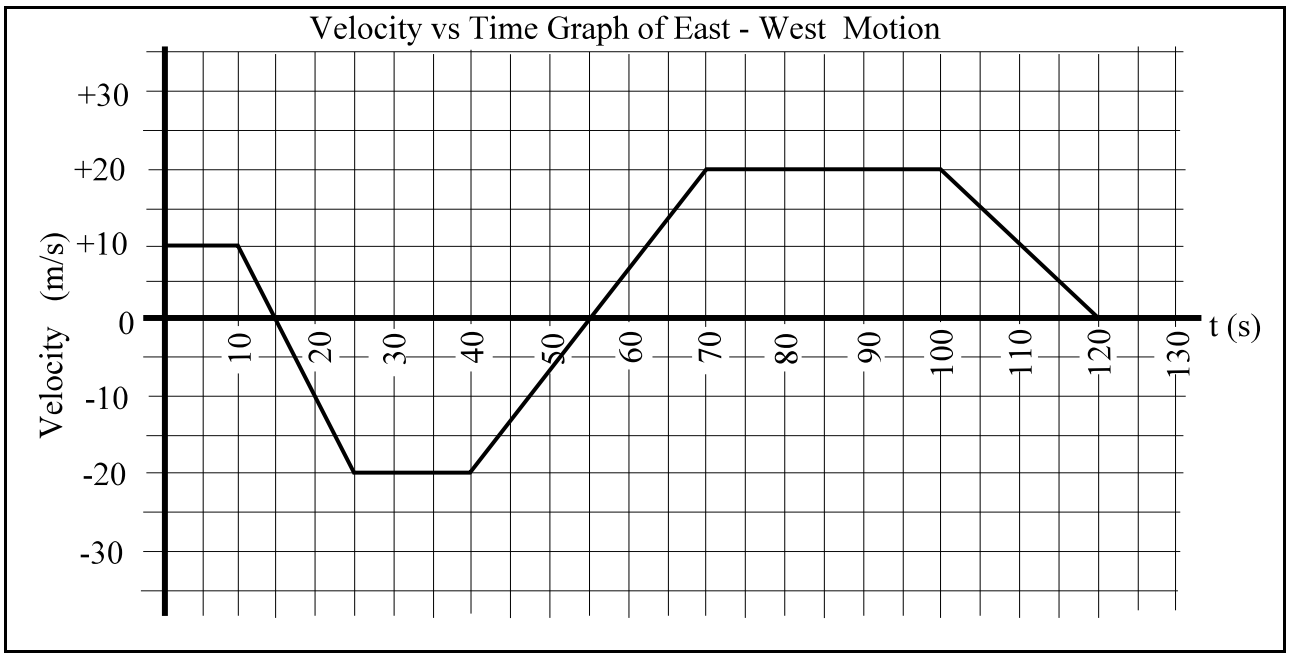
1. What was the maximum velocity achieved by the cart? _____
2. What was the cart's velocity at the 10 s point? _____
3. Between what times was there constant velocity? _____
4. During what time was there max. positive acceleration? _____
5. What distance was travelled from 0 to 8.0 s? _____
6. What was the average acceleration between t = 0 to 12 s? _____
7. When did the cart first start to move west? _____
8. When did the cart first return to the starting point? _____
9. What was the cart's acceleration at 18 s? _____
10. What was the average velocity for the first 8.0 s? _____
11. What was the average speed for the first 8.0 s? _____
12. What was the average velocity for the first 12 s? _____
13. What was the average speed for the first 12 s? _____
14. Explain the motion of the cart at t = 14 s? _____

Motion Graph # 7



1. During what time intervals did the object have:
   a. constant velocity? _____
   b. greatest positive acceleration? _____
   c. uniform negative acceleration? _____
   d. non-uniform negative acceleration? _____
   e. zero acceleration _____
2. What was the object's acceleration in the first 2 seconds? _____
3. What was the average acceleration in the first 4 seconds? _____
4. What was the instantaneous acceleration at 6.0 s? _____
5. What was the instantaneous acceleration at 22 s? _____
6. What was the average velocity between 12 and 14 s? _____
7. When did the object first start to move west? _____
8. What was the object's instantaneous velocity at 21 s? _____
9. What was the object's displacement in the first 2 seconds? _____
10. What was its displacement in the tenth second? _____

Motion Graph # 8



1. What is the object's velocity at the 20 s point? _____
2. What is the acceleration at the 5 s point? _____
3. What is the acceleration at the 15 s point? _____
4. What is the acceleration a the 110 s point? _____
5. During what time intervals is the object travelling East? _____
6. When is the object stopped? _____
7. What is the displacement at the 25 s point? _____
8. What is the distance travelled in the first 25 s? _____
9. What was the average velocity for the first 25 s? _____
10. What is the object doing at the 45 s point? _____
11. When did the object first return to the starting point? _____
12. What was the object's average speed in the first 40 s? _____
13. What was the average velocity in the first 40 s? _____
14. What is the object doing at the 90 s point? _____