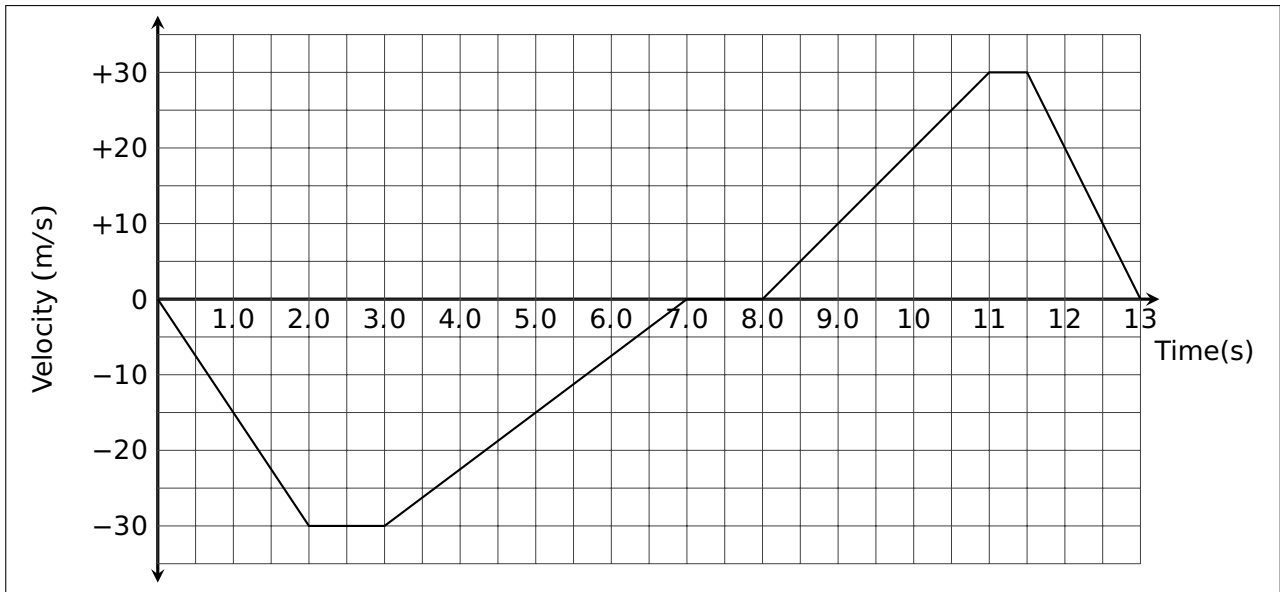
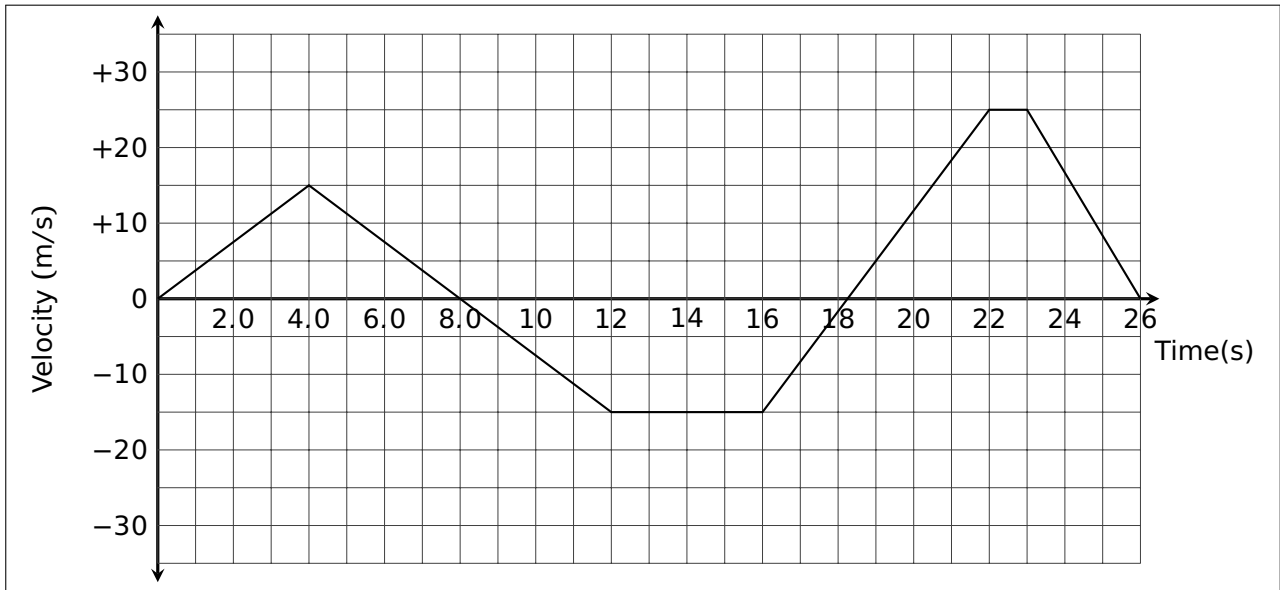


Motion Graph #5 - The following graph indicates the motion of a cart along a East-West path.



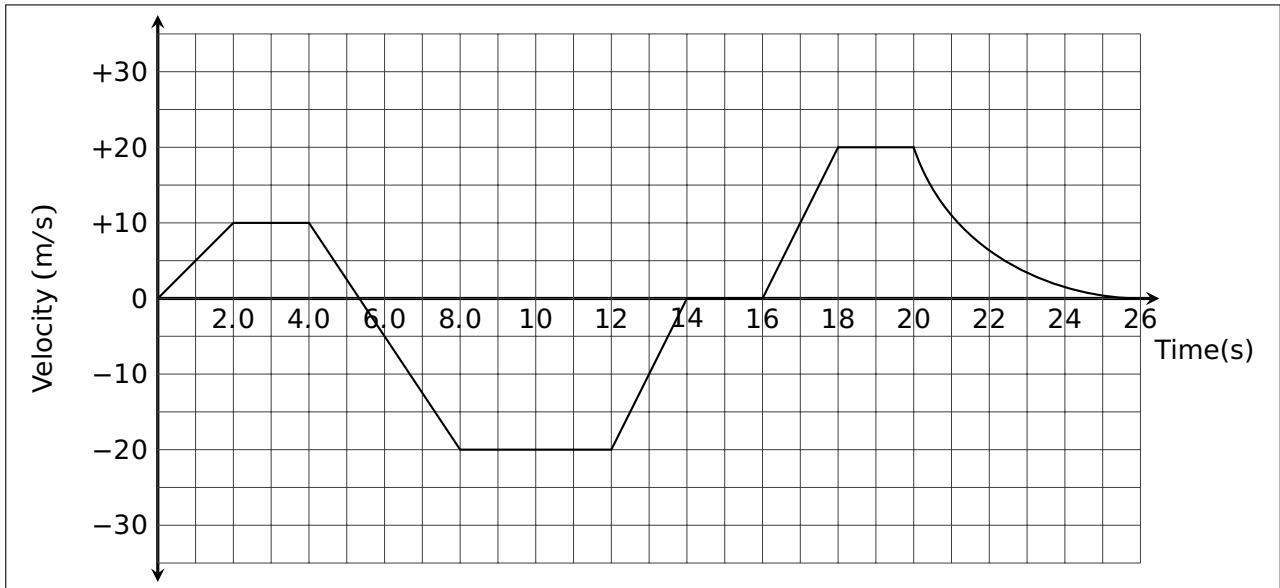
1. What is the cart's maximum velocity?? 1. _____
2. What is the velocity of the cart at 5.0 s? 2. _____
3. What is the acceleration of the cart at 5.0 s? 3. _____
4. When did the cart have constant velocity? 4. _____
5. When did it have negative acceleration? 5. _____
6. When did the cart have negative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

Motion Graph #6 - The following graph indicates the motion of a cart along a East-West path.



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

Motion Graph #7 - The following graph indicates the motion of an object along an East-West path.



1. During what time intervals did the object have:
 - (a) constant velocity? (a) _____
 - (b) greatest positive acceleration? (b) _____
 - (c) uniform negative acceleration? (c) _____
 - (d) non-uniform negative acceleration? (d) _____
 - (e) zero acceleration? (e) _____

2. What was the object's acceleration in the first 2 seconds? 2. _____

3. What was the average acceleration in the first 4 seconds? 3. _____

4. What was the instantaneous acceleration at 6.0 s? 4. _____

5. What was the instantaneous acceleration at 22 s? 5. _____

6. What was the average velocity between 12 and 14 s? 6. _____

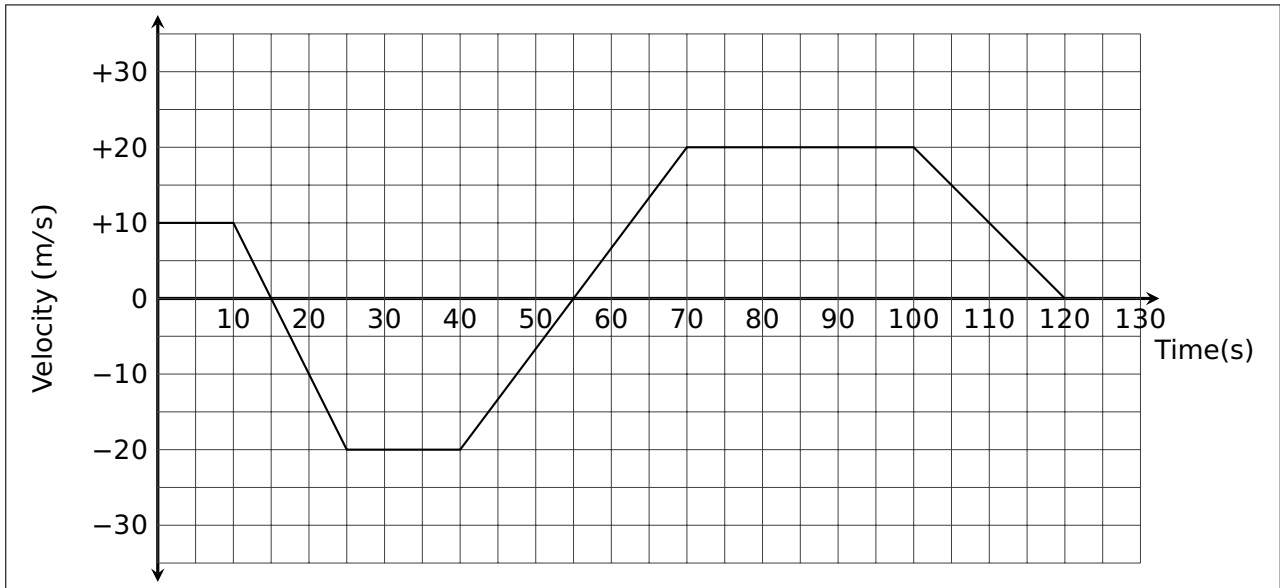
7. When did the object first start to move west? 7. _____

8. What was the object's instantaneous velocity at 21 s? 8. _____

9. What was the object's displacement in the first 2 seconds? 9. _____

10. What was its displacement in the tenth second? 10. _____

Motion Graph #8 - The following graph indicates the motion of an object along an East-West path.



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