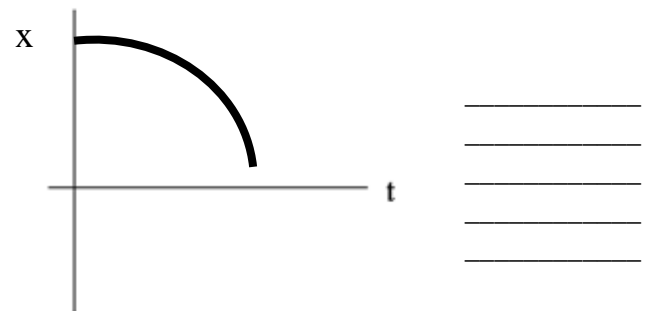
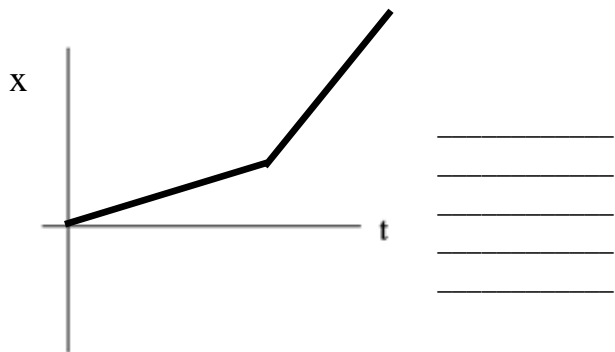
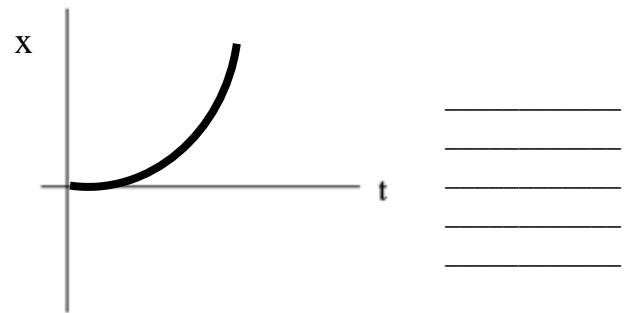
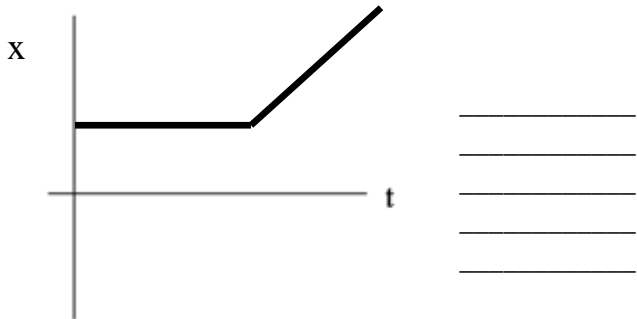
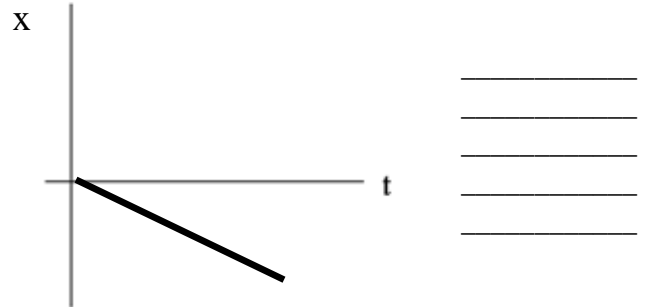
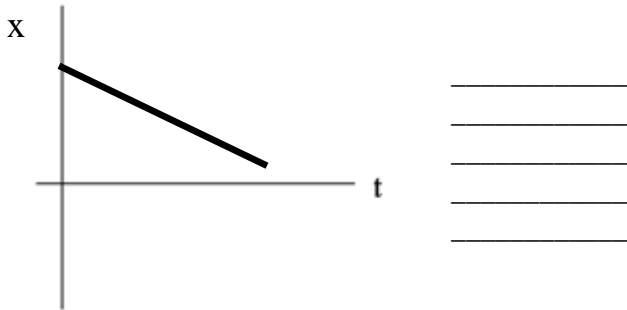
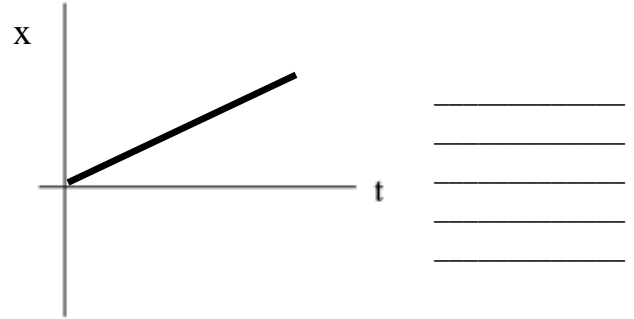
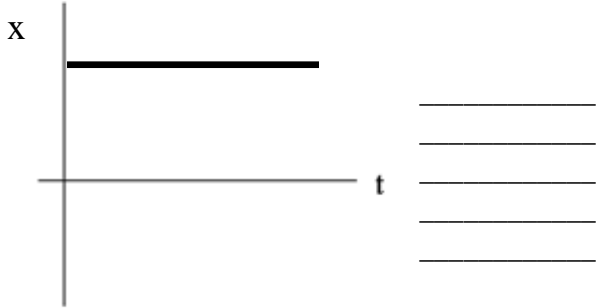


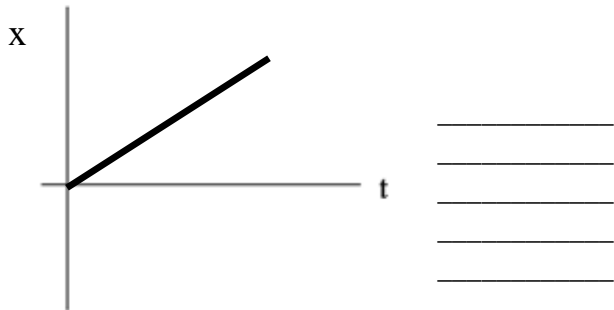
Position vs. time graphs  
Honors physics

Name \_\_\_\_\_

I. Describe how you would have to walk in order to reproduce the graphs below.



II. Describe all three of these quantities for each of the graphs below: (1) the position (2) the velocity and (3) the acceleration. Describe the position, velocity, and acceleration in terms of positive, negative, or zero quantities. Indicate if the quantities are constant.

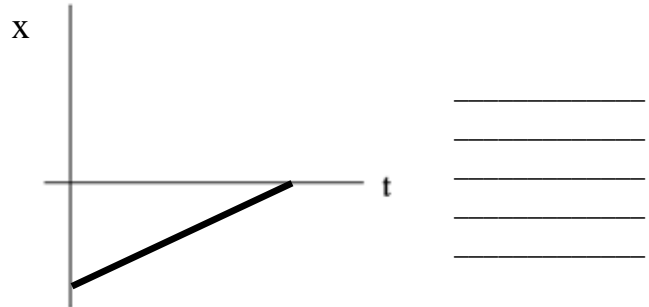


\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

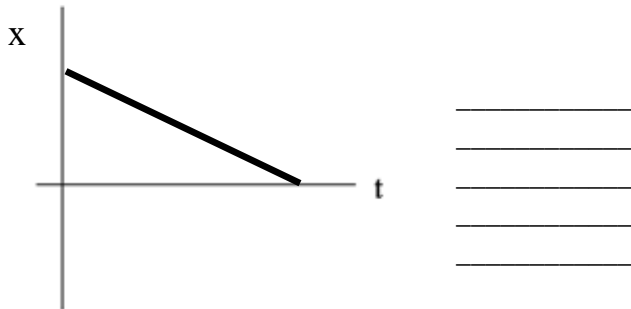


\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

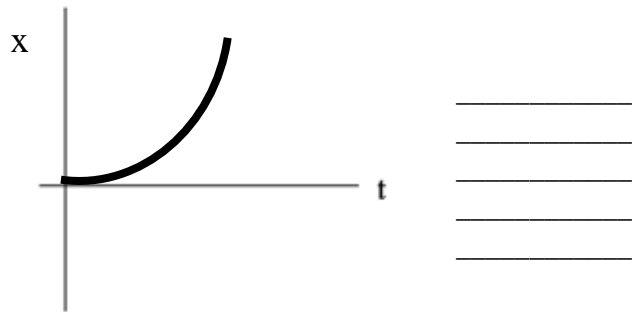


\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



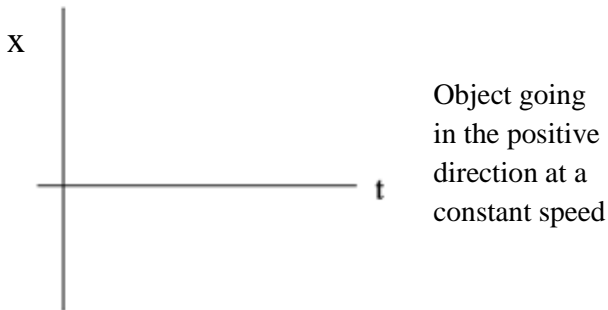
\_\_\_\_\_

\_\_\_\_\_

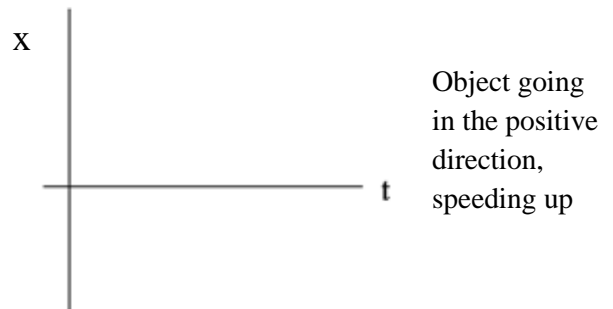
\_\_\_\_\_

\_\_\_\_\_

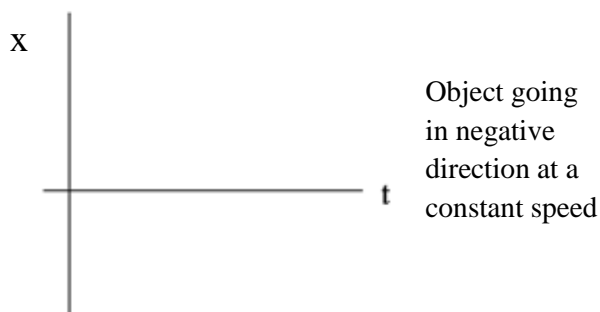
III. Given the descriptions, construct the corresponding position vs. time graphs.



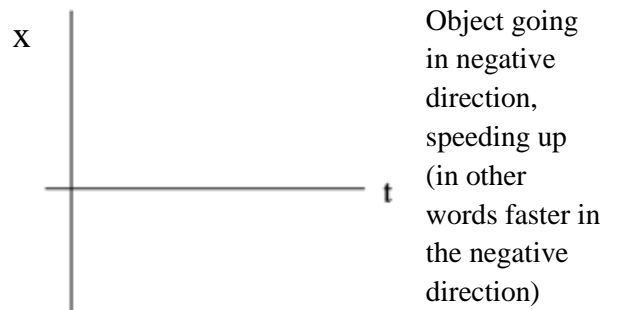
Object going in the positive direction at a constant speed



Object going in the positive direction, speeding up

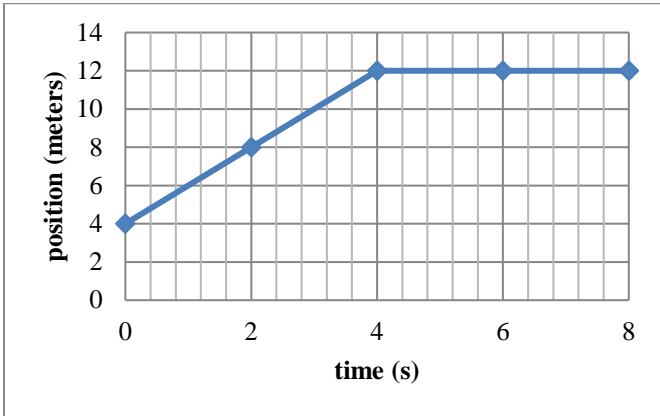


Object going in negative direction at a constant speed

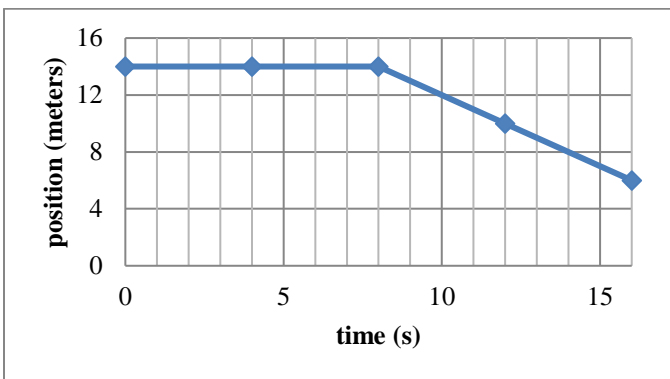


Object going in negative direction, speeding up (in other words faster in the negative direction)

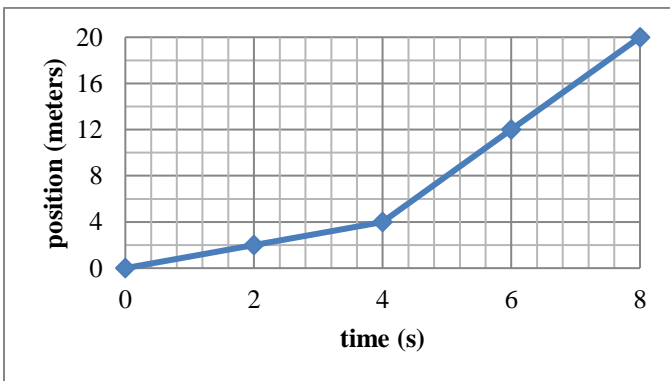
IV. Position vs. Time graph Calculations



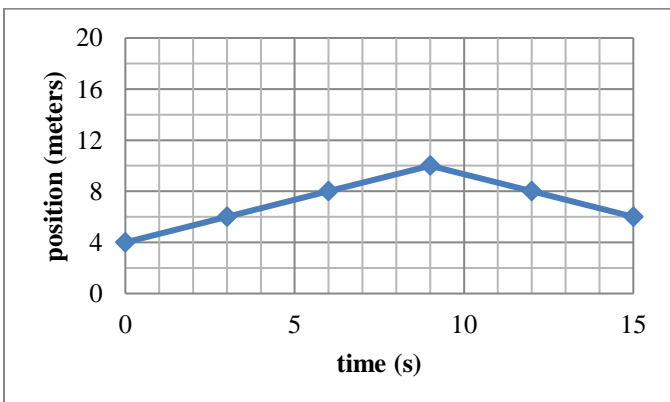
1. What is the distance traveled by the object from 0s to 4s?
2. What is the velocity of the object between 0s and 4s?
3. What is the velocity of the object between 4s and 8 s?



4. What is the velocity of the object between 0 s and 8s?
5. What is the velocity of the object between 8s and 16s?



6. What is the instantaneous velocity of the object at  $t = 6s$ ?
7. What is the instantaneous velocity of the object at  $t = 7s$ ?



8. What is the distance traveled by the object from 0s to 15s?
9. What is the displacement traveled by the object from 0s to 15s?
10. What is the instantaneous velocity of the object at  $t = 12s$ ?