

1 Motion

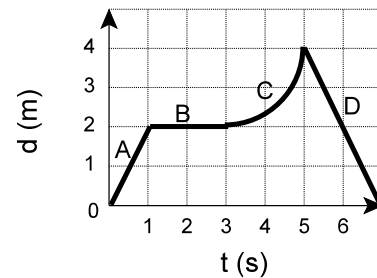
Name _____

QUIZ Practice Problems

Inquiry Physics

- A fly takes off with an acceleration of 0.700 m/s^2 from a wall. How many seconds will it take the fly to reach a speed of 12.6 km/h ?

- In the graph:
 - What is the speed and acceleration from 0 to 1 seconds?
 - What is the speed and acceleration from 1 to 3 seconds?
 - What is the object doing from 3 to 5 seconds?
 - What is the object doing from 5 to 7 seconds?



- A train is rolling down an incline, accelerating at a rate of 3.00 m/s^2 . It passes the evil Victor Vector at a rate of 2.00 m/s .
 - Poor Velma Velocity is tied to the train track. How fast is the train moving when it reaches her 10.0 seconds later?

- How far is Velma from Victor?

- Mr. M is a human cannonball in his spare time. If the cannon he uses is 1.75 meters long and he exits the cannon at a speed of 20.0 m/s , what acceleration does the cannon impart to Mr. M?

- Mr. M rides his tricycle to school every day. He accelerates at a constant rate of 0.0400 m/s^2 throughout his journey. If Mr. M reaches BHS after 10.0 minutes have passed, how fast is he going when he arrives at the school?

Answers:
 1) 5.00 s
 2) a. 2 m/s ; 0 m/s^2
 b. 0 m/s ; 0 m/s^2
 3) a. 32.0 m/s
 b. $170. \text{ m}$
 4) 114 m/s
 5) 24.0 m/s
 3) a. moving backward at a constant speed
 b. speeding up (accelerating positively)
 c. speeding up (accelerating positively)
 d. moving backward at a constant speed