

برعاية معالي وزير التربية والتعليم
السيد الأستاذ / محمد عبد اللطيف
وتوجيهات مساعد الوزير لشئون المناهج المطورة و
المشرف على الإدارة المركزية لتطوير المناهج

د/ اكرم حسن

اداءات وتقييمات

الصف الثالث الاعدادي

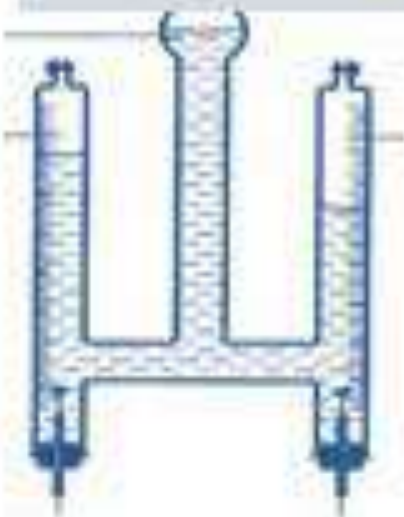
لجنة الاعداد والمراجعة

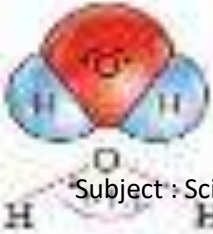
خبراء مكتب تنمية مادة العلوم

اشراف علمي

مستشار العلوم

د/ عزيزه رجب خليفة





Subject : Science

3rd prep



Lesson : Graphing for motion in a straight line

Essay questions

1) Explain the following:

Motion with uniform speed is represented in the graphical relationship (distance - time) by an inclined straight line passing through the origin.

2) Explain the following:

Physicists and mathematicians use mathematical relationships and tools such as tables and graphs

3) Explain the following:

An object that is accelerating cannot be moving at a uniform speed.

4) What does it mean that :

An object has a uniform acceleration of 10 m/s^2

5) What is the meaning of :

An object has a positive uniform acceleration of 3 m/s^2

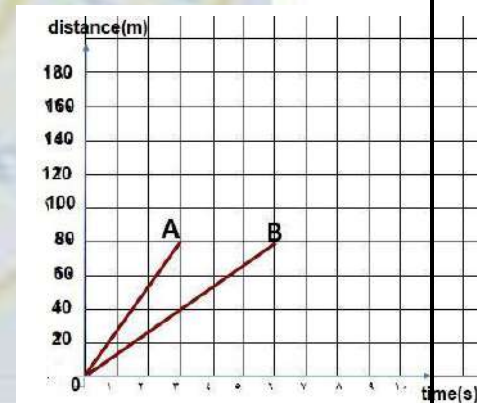
6) compare :

Positive uniform acceleration and negative uniform acceleration

7) In the opposite figure:

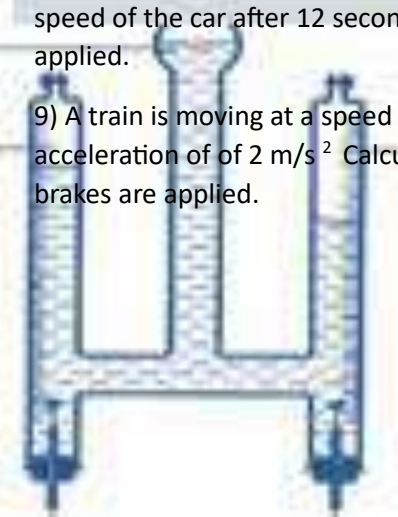
Calculate the ratio of the speed of object A to

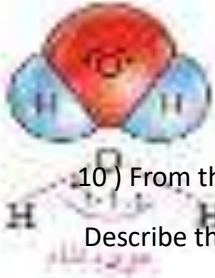
the speed of object B



8) A car is moving at a speed of 80 m/s and when the driver applies the brakes, it acquires a decreasing acceleration of 2 m/s^2 . Calculate the speed of the car after 12 seconds from the moment the brakes are applied.

9) A train is moving at a speed of 90 km/s and when the driver applies the brakes, it has a negative acceleration of 2 m/s^2 . Calculate the time required for the train to stop from the moment the brakes are applied.

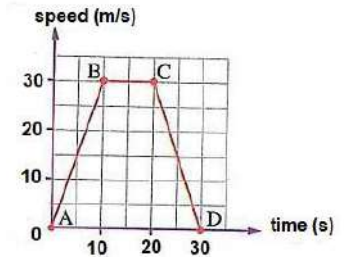




10) From the figure opposite:

Describe the motion of the object in the intervals

(AB), (BC), (CD)



11) A car started moving from rest and after 2 seconds its speed became 4 m/s and remained at the same speed for another 2 seconds. moving at the same speed for another 2 seconds and then the driver had to use the brakes to slow down its speed to 2 m/s in the fifth second and came to a complete stop after another 2 seconds:

- 1) Design a table with the speed and time values of the car's motion.
- 2) Graphically represent the motion of the car from the relationship (speed - time)

12) The table opposite shows the results that were recorded for an object moving at a uniform speed:

| | distance(m) | time (s) | speed (m/s) |
|-----|-------------|----------|-------------|
| (1) | 50 | | 100 |
| (2) | | 2 | |

- (a) Complete the table
- (b) Calculate the magnitude of the acceleration of the moving object

13) A car changes its speed from 20 m/s to 60 m/s in a time of 4 s. Calculate the acceleration of the car.

14) If at one moment the speed of an object is 50 m/s and after 5 seconds its speed is 50 m/s, calculate the acceleration of the object.

15) The corresponding distance-time graph shows an object moving at a uniform speed.

What is the speed of the object?

