

DON'T FORGET THESE PROBLEMS!!

Ch 11 Review (p. 351) 1-6, 8-10, 14, 17-21

Ch 12 Review (p. 385-6)- 2, 4-12, 14, 18, 23

Ch 14 Review (p. 441)- 1-4

1. A girl starts at home and goes 4 meters east, then 4 meters west, then 7 meters east, then 11 meters west, then 9 meters east.
 - a. What is her final distance traveled?

 - b. What is a her final displacement?

2. A boy starts at home and goes 3 m east then 4 m north.
 - a. What is her final distance traveled?

 - b. What is a her final displacement?

3. An earworm travels 1.60 meters in 5.000 seconds on its trip from your toe to your ear for lunch. What is its speed?

4. If a mouse riding a zebra is traveling for 45,000.0 meters and it is moving at 1.5m/s, then how long does it ride for in seconds? in minutes?

5. A snake is traveling at .045 m/s on the freeway when it gets stuck behind a slug so it continues at that velocity. Then it passes, and reaches a speed of 1.5m/s and this take .85s. What is the acceleration of the snake during this process?

6. You drop a rock on planet earth and it has a mass of 4.85 kg. What is its force?

7. What is the acceleration of a zombie that approaches Rick? It was initially at rest, and has a final velocity of 5.7 m/s, and took 3.2 seconds to do this.

8. A baby applies 500N of force to a pacifier that he is throwing at his big sister. The pacifier has a mass of 0.3 Kg. How fast is this pacifier accelerating towards big sister?

9. Mr. Howell is running at 8 meters per second due west. He speeds up to 12 meters/sec in 8 seconds time in order to pass a herd of antelope. What was his acceleration?

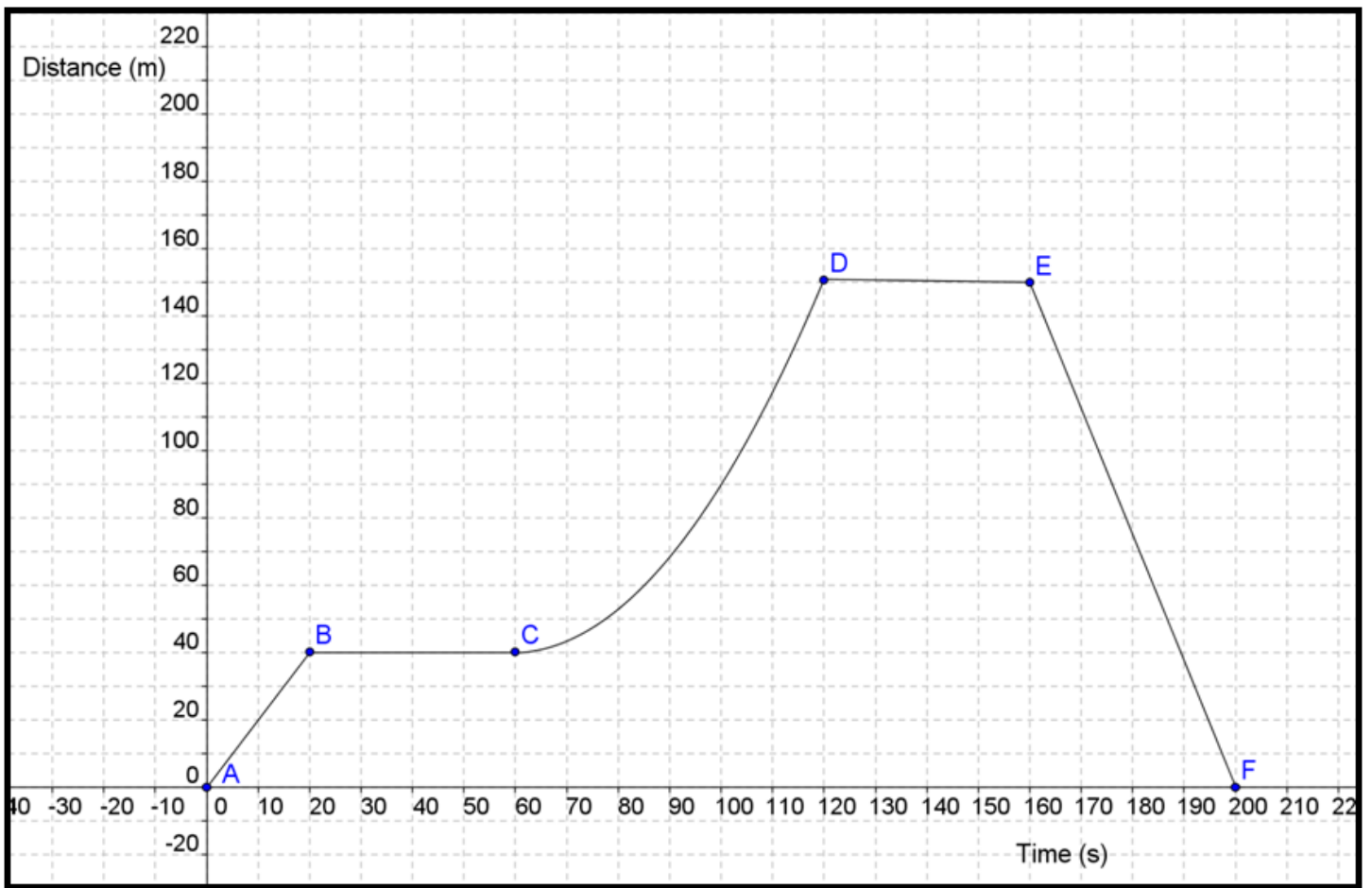
10. If the school could levitate and then move like a spacecraft, and it was moving due east at 600 meters/sec. How far will he travel after 30 seconds?

11. Superman is pushing a train with 500.0 N. How much work does he do to push the train 890.0 m?

12. From the previous question, Superman does this over 30 seconds, how much power does Superman exert while pushing the train?

13. The Hulk applies 200N of force to a boulder that he is throwing at Loki. The boulder has a mass of 100 Kg. How fast is this boulder accelerating towards Loki?

14. A car is traveling at 32 meters per second due west. The driver speeds up to 72 meters/sec in 8 seconds time in order to pass a herd of goats. What was the car's acceleration?



15. Look at the Distance-Time Graph above to answer the following questions.

a. When is the object at rest?

b. When is the object moving back towards the starting position?

c. What is the total displacement of the object?

d. When is the object accelerating?

e. What does the slope of a distance-time graph tell you?

f. When is the person moving uphill?

16. Ball A is dropped from a height of 6 ft while Ball B is rolled off a table at the same height.

a. Which Ball will hit the ground first?

b. What is the force acting on ball A called?

c. What is the force acting on ball B called?

17. Earth completes an orbit around the Sun.

a. Is this called a revolution or a rotation?

b. What is the force that is pulling the Earth towards the Sun?

c. Mars is farther away from the Sun than Earth. Which planet has a stronger pull of gravity from the Sun?