1.

The formula for speed is _____?_____

2.

If you travel 10 meters in 5 seconds, what is your speed?

3.

Katniss can run 50 yards in 10 seconds and Tris can run 100 yards in 20 seconds. Who has a faster speed?

4.

In science, a push or a pull is called a(n) _____?_____

5.

According to Newton's 1st law, what will an object in motion tend to do?

-Gradually slow down

-Stay in motion

-Speed up

-Spin out of control

6.

We know an object is in motion if

-It is moving relative to a reference point

-It is rolling

-It has a direction

-It has a location

7.

The rate at which velocity changes is called

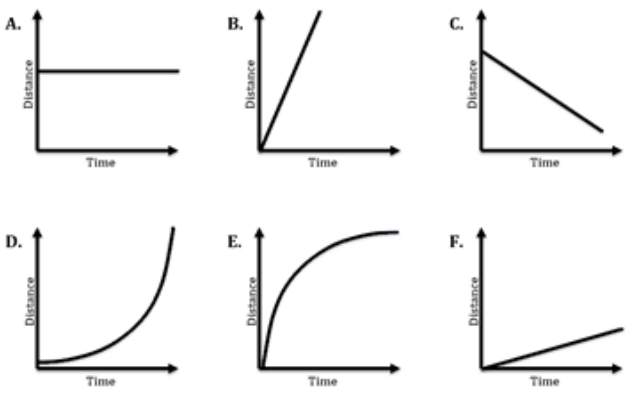
-instantaneous speed.

-direction.

-acceleration.

-motion.

8.



Which graph shows ***Moving Backwards?***

(constant velocity in reverse)

9.

Friction acts in what direction relative to the object's direction of motion?

-The same direction as the object

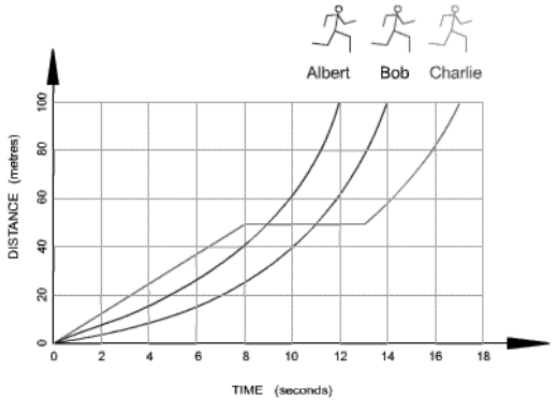
-A direction opposite to the object

-A direction perpendicular to the object

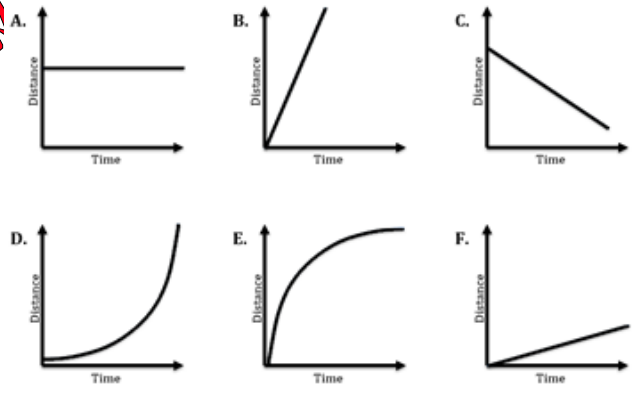
-At a 45 degree angle to the object

10.

According to this data, who won a race between Albert, Bob, and Charlie?



11.

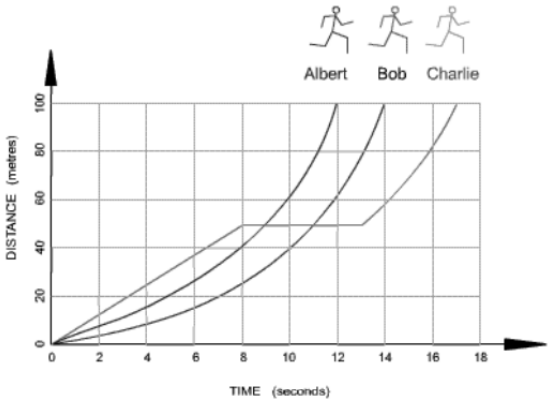


Which graph shows

No Motion? (stopped)

12.

According to this data, Which racer had to take a break?



13.

What is a force that commonly opposes motion?

-Gravity

-Magnetism

-Inertia

-Friction

14.

On a graph showing distance versus time, a horizontal line represents an object that is

-moving at a constant speed.

-increasing its speed.

-decreasing its speed.

-not moving at all.

15.

_____?_____

is a change in position measured by distance and time.

16.

_____?_____

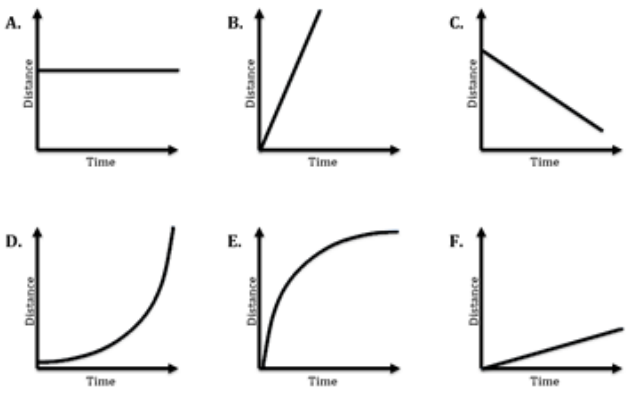
tells us the rate at which an object moves.

17.

What effect does friction have on a rolling ball?

- ***It causes the ball to slow down***
- ***It causes the ball to roll faster***
- ***It has no effect on a rolling ball***
- ***It causes the rolling ball to collide with another rolling ball***

18.



Which graph shows

Acceleration?

19.

_____?_____

tells the speed and direction of a moving object.

20.

_____?_____

tells us the rate speed or direction changes.

21.

When you know both the speed and direction of an object's motion, you know the

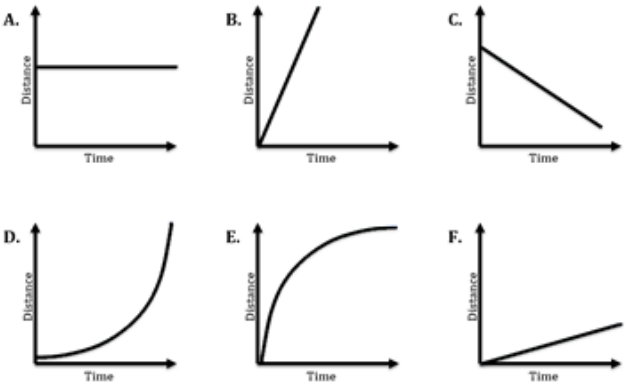
-average speed of the object.

-acceleration of the object.

-distance the object has traveled.

-velocity of the object.

22.

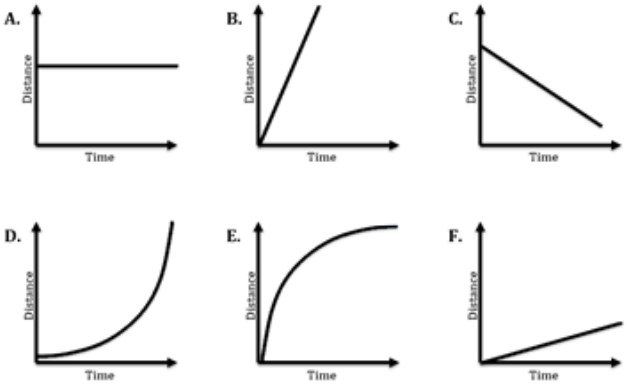


Which graph shows

Negative Acceleration?

(deceleration)

23.

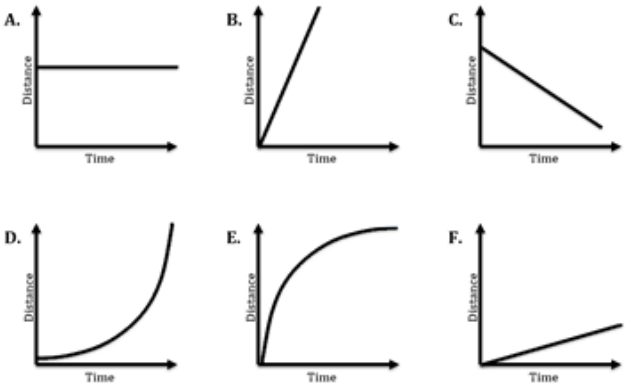


Which graph shows

Constant Speed?

(high rate of speed)

24.

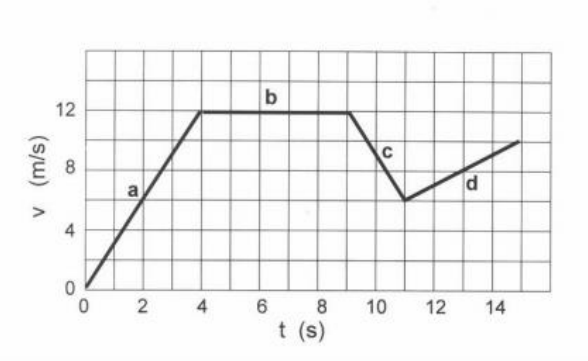


Which graph shows

Constant Speed?

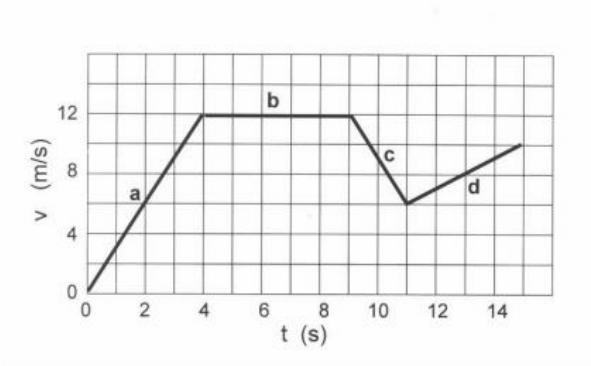
(low rate of speed)

25.



In which section is the object accelerating from rest?

26.



In which section is the object's acceleration negative?

27.

A Ferris wheel moving at constant speed is accelerating because the

-Direction is always changing

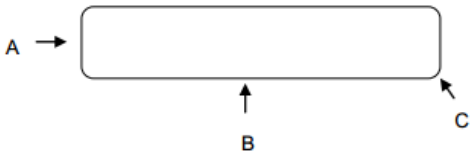
-Wheel moves relative to the ground.

-Wheel moves relative to the sky

-The average speed does not change

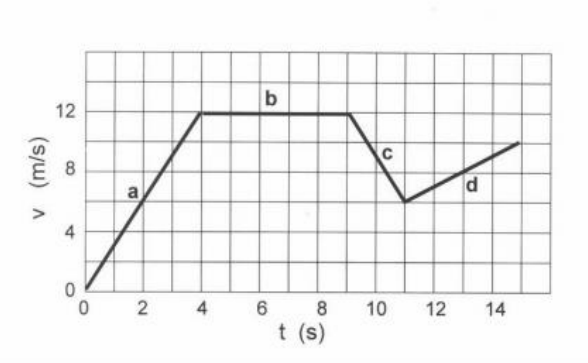
28.

A race car is traveling around an oval track at a constant speed. At which point on the oval track does the race car accelerate?



29.

How far does the car travel in section "b"?



30.

To describe the motion of an object, use

-direction and speed

-mass and volume

-speed and color

-volume and direction

31.

If a boat is traveled 500 meters in 25 seconds what is it's average speed?

32.

In which of the following examples is a skater NOT accelerating?

-Going straight while speeding up

-Making circles at constant speed

-Going straight at constant speed

-Going straight while slowing down

33.

34.

35.

36.

37.

The table lists data about two objects at different speeds. Plot this data on the graph provided.

Time (hr)	Distance Object 1 (km)	Distance Object 2 (km)
1	150	200
2	300	400
3	450	600
4	600	800
5	750	1000
6	900	1200

38.

Create a graph using the data in the table below. The data represents the motion of a train over a period of time

Time (hours)	Speed (Km/hr)
0	0
1	20
2	40
3	60
4	60
5	100
6	100
7	130
8	160

39.

Sketch a position vs. time graph for this situation:

At track practice, your coach makes the team members run back and forth between two lines three times.

40.

Sketch a speed vs. time graph for this situation:

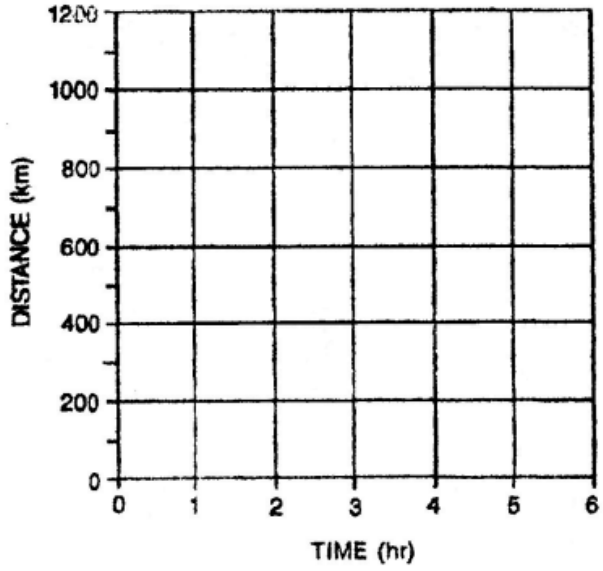
A car is driving down the road at 55 mph, and after getting a flat tire moves at 35 mph.

Name_____

Motion Task Cards

1	**2**
3	**4**
5	**6**
7	**8**
9	**10**
11	**12**
13	**14**
15	**16**
17	**18**
19	**20**
21	**22**
23	**24**
25	**26**
27	**28**
29	**30**
31	**32**
33	**34**
35	**36**

37



38

39

40.