

00 : 38 : 15

Question 6 / 10

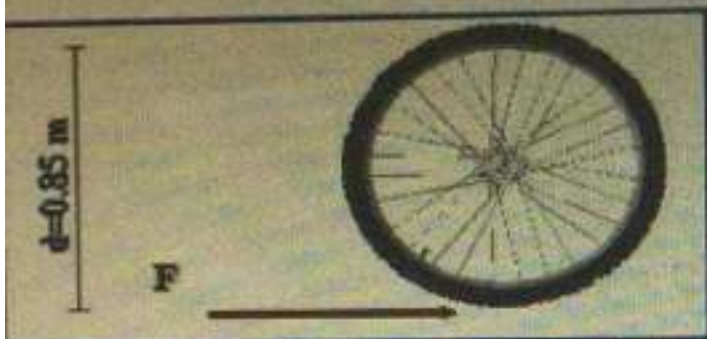
A block with a mass $m = 5 \text{ kg}$ slides down an inclined plane with an angle of 37° maintains a constant acceleration $a = 5.6 \text{ m/s}^2$. The coefficient of kinetic friction block and the inclined surface is 0.15. What is the friction force between the block and the inclined plane?

1. 2 N
2. 4 N
3. 6 N
4. 8 N
5. None Of the above

Next

إضافة ملاحظة

00 : 25 : 41



Question 9 / 10

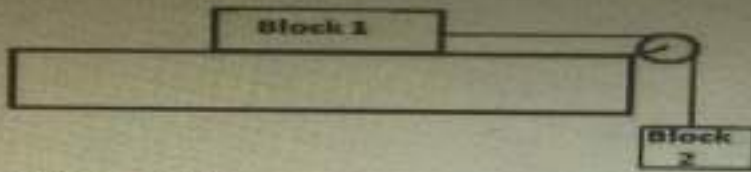
You spin a bicycle wheel (diameter of 0.85 m, mass of 4.5 kg), applying a force F tangentially. What is the torque on the wheel?

1. 10.2 N m
2. 12.8 N m
3. 14.5 N m
4. 17.0 N m
5. None Of the above

Next

إضافة ملاحظة

00 : 43 : 4



Question 5 / 10

A block (block-1) of mass $2m$ can move without friction on a horizontal table. It is attached to another block (block-2) of mass m by a string that passes over a pulley. If the masses of the string and the pulley are negligible, what is the magnitude of the acceleration of the descending block?

1. $g/3$
2. $g/4$
3. $g/5$
4. $g/6$
5. None Of the above

None

Submit Answer

0 : 58 : 34

Question 1 / 10

How long does it take to accelerate an object from rest to 6 m/s if the acceleration was 3 m/s^2 ?

1. 5 sec
2. 4 sec
3. 3 sec
4. 2 sec
5. None Of the above

Next

Submit Answer

00 : 50 : 2

Question 4 / 10

The average speed of an object is defined to be:

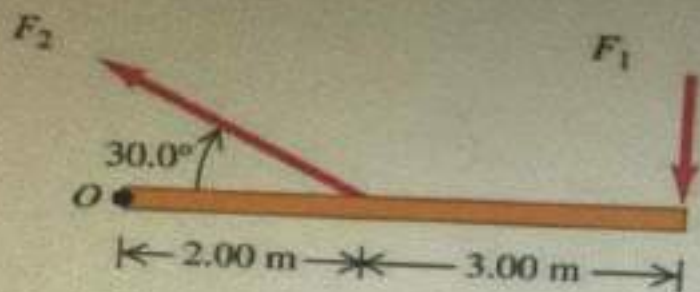
1. one half of the sum of the maximum and the minimum speeds.
2. the distance it travels divided by the time it takes.
3. distance it travels multiplied by the time it takes.
4. the speed determined over an infinitesimally small time interval.
5. None Of the above

Next

إضافة ملاحظة

Finish

00 : 25 : 9



Question 10 / 10

Calculate the net torque about point O for the two forces applied ($F_1 = 8\text{N}$ and F_2 in the figure. The rod and both forces are in the plane of the page?

1. -28 N.m
2. -38 N.m
3. -48 N.m
4. -58 N.m
5. None Of the above

إضافة ملاحظة

00 : 50 : 27

Question 3 / 10

A stone is thrown straight downward with initial speed of 37 m/s from a height of 25 m the ground. Find the speed with which it strikes?

1. 24 m/s
2. 30 m/s
3. 35 m/s
4. 43 m/s
5. None Of the above

Next

إشارة ملاحظة

00 : 50 : 15

Question 2 / 10

A body with initial velocity 10 m/s moves along a straight line with constant acceleration and travels 640 m in 40 s. The velocity (in m/s) of the body at $t = 40$ s is:

1. 24
2. 22
3. 18
4. 16
5. None Of the above

Next

إشارة ملاحظة

اضغط على الرقم للانتقال مباشرة للسؤال

1 2 3 4 5 6 7 8 9 10 11 12

00 : 25 : 23

Question 5 / 12

the apparatus that is used to measure the specific heat capacity is:

1. thermometer
2. ultramicrotome
3. calorimeter
4. infrared detector
5. thermostat

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إضافة علامة

اضغط على الرقم للانتقال مباشرة للسؤال

1 2 3 4 5 6 7 8 9 10 11 12

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Question 3 / 12

The kinetic energy can be positive or negative

1. True
2. False

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Next

إضافة علامة

00 : 25 : 28

Question 4 / 12

A car is moved from rest under a constant force equals 60 N what is the kinetic energy of the car when it moved a 30 m distance.

1. 3000 J
2. 1200 J
3. 500 J
4. 1800 J
5. 1500 J

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إضافة للاطلاع

00 : 24 : 58



Question 9 / 12

A mass ($m = 5 \text{ kg}$) is moved a 2m displacement on a rough surface (سطح مشد) under a horizontal force $F = 50 \text{ N}$. If the coefficient of kinetic friction $\mu_k = 0.4$, and $g = 10 \text{ m/s}^2$. The work done by the frictional force equals to:

1. 16 J
2. -40 J
3. -80 J
4. 40 J

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إضافة للاطلاع

00 : 25 : 40

Question 1 / 13

A rock (حجر) is submerged in a container of water of depth (عمق) 3 m , if the rock density is 5000 kg/m^3 and the water density 1000 kg/m^3 then the pressure on the rock in Pascal units equals to: ($1\text{atm}=1.013\times 10^5\text{ Pa}$)

1. 6.013×10^5
2. 2.013×10^5
3. 1.213×10^5
4. 3.513×10^5

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إستعمل على الرقم للإجابة

00 : 25 : 48

Question 1 / 12

if $T = 52\text{ F}^\circ$ then T in Kelvin equals to:

1. 284 K°
2. 319.7 K°
3. 309 K°
4. 125.6 K°

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إستعمل على الرقم للإجابة

00 : 26 : 9

Question 10 / 12

which statement is wrong:

1. the preferred (المفضل) pressure unit in medicine is torr
2. the kinetic energy of the gas is proportional to the temperature
3. the standard unit of pressure is atm
4. the osmosis pressure is the opposite of diffusion

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السؤال التالي

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00 : 25 : 12

Question 7 / 12

which statement is wrong for thermography technique:

1. The infrared radiation from the patient is collected
2. $\Delta T = 0.1^\circ \text{C}$ is detectable
3. The lower temperature appears lighter
4. It is used in cancer therapy
5. All are wrong

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00 : 25 : 12

Question 7 / 12

which statement is wrong for thermography technique:

1. The infrared radiation from the patient is collected
2. $\Delta T = 0.1^\circ \text{C}$ is detectable
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Question 8 / 12

The water boiling temperature in Kelvin scale equals 273.15 K

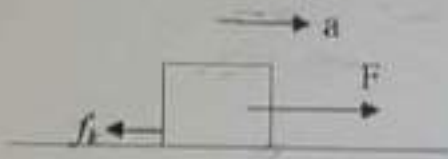
1. True
2. False

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Question 5 / 13

A block of 5kg mass is pulled by a horizontal force $F= 10$ N. if its acceleration equals 2m/s^2 then the frictional force equals to:

1. 4 N
2. 10 N
3. 5 N
4. 0 N

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السؤال بلاغمة

00 : 36 : 51

Question 3 / 13

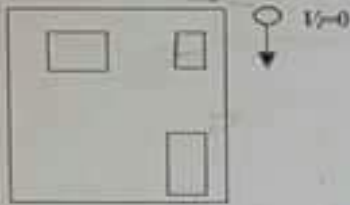
which statement is right from the following statements:

1. The synovial fluid increases the frictional force
2. The coefficient of static friction is less than the coefficient of kinetic friction
3. The speed is always positive
4. The displacement is always greater than zero
5. The conditions of static equilibrium is the net force equals zero

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Question 4 / 13

a ball is dropped from rest from a top of a building of height equals to 50 m. what is the height of the ball from the ground when its velocity equals to 20 m/s downward? (Assume $g=10 \text{ m/s}^2$)

1. 5 m
2. 45 m
3. 15 m
4. 30 m

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إستارة بالخط

FUJITSU

00 : 35 : 7

Question 9 / 13

The position for a moving object is given by the equation: $x(t)=3t^3-4$. The acceleration (m/s^2) at $t=2$ seconds equal to:

1. 18
2. 32
3. 36
4. 20
5. 6

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Next

إستارة بالخط

00 : 35 : 7

Question 9 / 13

The position for a moving object is given by the equation: $x(t) = 3t^3 - 4$. The acceleration (m/s^2) at $t = 2$ seconds equal to:

1. 18
2. 32
3. 36
4. 20
5. 6

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إنتهاء الملاحظة

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إضغط على الرقم للانتقال مباشرة للسؤال

1 2 3 4 5 6 7 8 9 10 11 12 13

00 : 35 : 27

Question 8 / 13

A car rounds a curve with constant acceleration. If the radius of the curve is doubled how does the velocity change?

1. $v_2 = v_1 / 2$
2. $v_2 = 0.7v_1$
3. $v_2 = 1.7v_1$
4. $v_2 = 1.4v_1$

Previous

Next

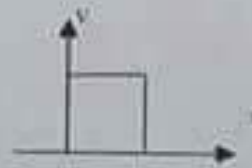
إنتهاء الملاحظة

Finsh

00 : 34 : 10

Question 13 / 13

The following graph represent a velocity time graph. Choose the graph that represent the acceleration time graph.

1. 2. 3. 4. 

00 : 34 : 19

Question 12 / 13

A given equation: $t = A/x^2 + Bx$ where t is the time, x is the position. The dimension of the quantity A is:

1. T/L^2
2. TL
3. L/T
4. TL^2

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الاجابة

00 : 36 : 8

Question 6 / 13

The torque of a 30N force that is applied to a rigid body at angle 37° equals to 7.5 N.m , then the force arm (r) equals to ?

1. 42 cm
2. 83 cm
3. 50cm
4. 31cm
5. 25 cm

00 : 36 : 30

Question 7 / 13

A moving object accelerates from 5 m/s velocity to 25 m/s in 2 seconds. How far will it travel that time?

1. 33 m
2. 20 m
3. 30 m
4. 10 m
5. 50 m

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السؤال التالي

00 : 42 : 0

Question 2 / 13

, then the magnitude of the vector D is equal to:

1. 15.3
2. 3
3. 6.4
4. 5.3

$$\vec{A} = \hat{x} + \hat{y}, \vec{B} = -2\hat{x} - 3\hat{y}, \vec{D} = \vec{B} - 2\vec{A}$$

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إجابة خاطئة

أسأل الله لكم التوفيق