Question **2**

Not yet answered

Marked out of 1

Flag question

Given **M** = 6 **i** + 2 **j** - **k** and **N** = 2 **i** + **j**+ 3 **k**, calculate the magnitude of **M** x **N**.

- 40
- 28
- 21
- 47
- 34

Finish attempt ...

Previous activity

← ch.4 Two Dimensional Motion

elect one:

- -120 J
- -200 J
- -160 J
- -80.0 J
- -40.0 J

A 800 kg car is going around a curve with a radius of 120 m that is banked at an angle of 25.0° with a speed of 30.0 m/s. The coefficient of static friction between the car and the road is 0.300. What is the force exerted by friction on the car?

Select one:

- 1631 N
- 1359 N

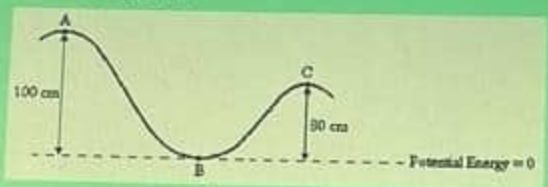
Question 25

Not yet answered

Marked out of 1

Flag question

A 2.0 g bead slides along a wire, as shown in the figure. At point A, the bead is at rest. Neglect friction. What is the speed of the bead at point B?



Select one:

- 44.7 m/s
- 20.0 m/s
- 4.47 m/s
- 200 m/s
- 14.1 m/s

vious page

Finish attempt ...

ous activity

مجموع أعمال الفصل ، الشعبة رقم 3، د. عبدالر

Jump to...

Next activity

Ch.2 Motion in one Dimension ▶

ation 3
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One way to specify a vector in 3

Select one:

- give one of its components.
- give its magnitude and the quadrant
- None of the other choices is correct.
- give its magnitude.
- give its magnitude and the angle θ it makes with the positive x-axis.

stion 4
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stion

What force is needed to make an object move in a circle?

Select one:

- static friction

Not yet answered

Marked out of 1.000

Flag question

Time left 0:30:09

The height of a helicopter above the ground is given by $h = 3.0\ t^2$, where h is in meters and t is in seconds. After 4.0 s, the helicopter releases a small mailbag. How long after its release does the mailbag reach the ground?

$(g = 10\ m/s^2)$

- 6.3 s
- 9.5 s
- 7.9 s
- 4.7 s
- 3.1 s

Question 2

Not yet answered

Marked out of 1.000

Flag question

A freely falling object requires

answered

Marked out of 1

Flag question

Select one:

- give one of its components.
- give its magnitude and the quadrant
- None of the other choices is correct.
- give its magnitude.
- give its magnitude and the angle θ it makes with the positive x-axis.

Question 4

Answer saved

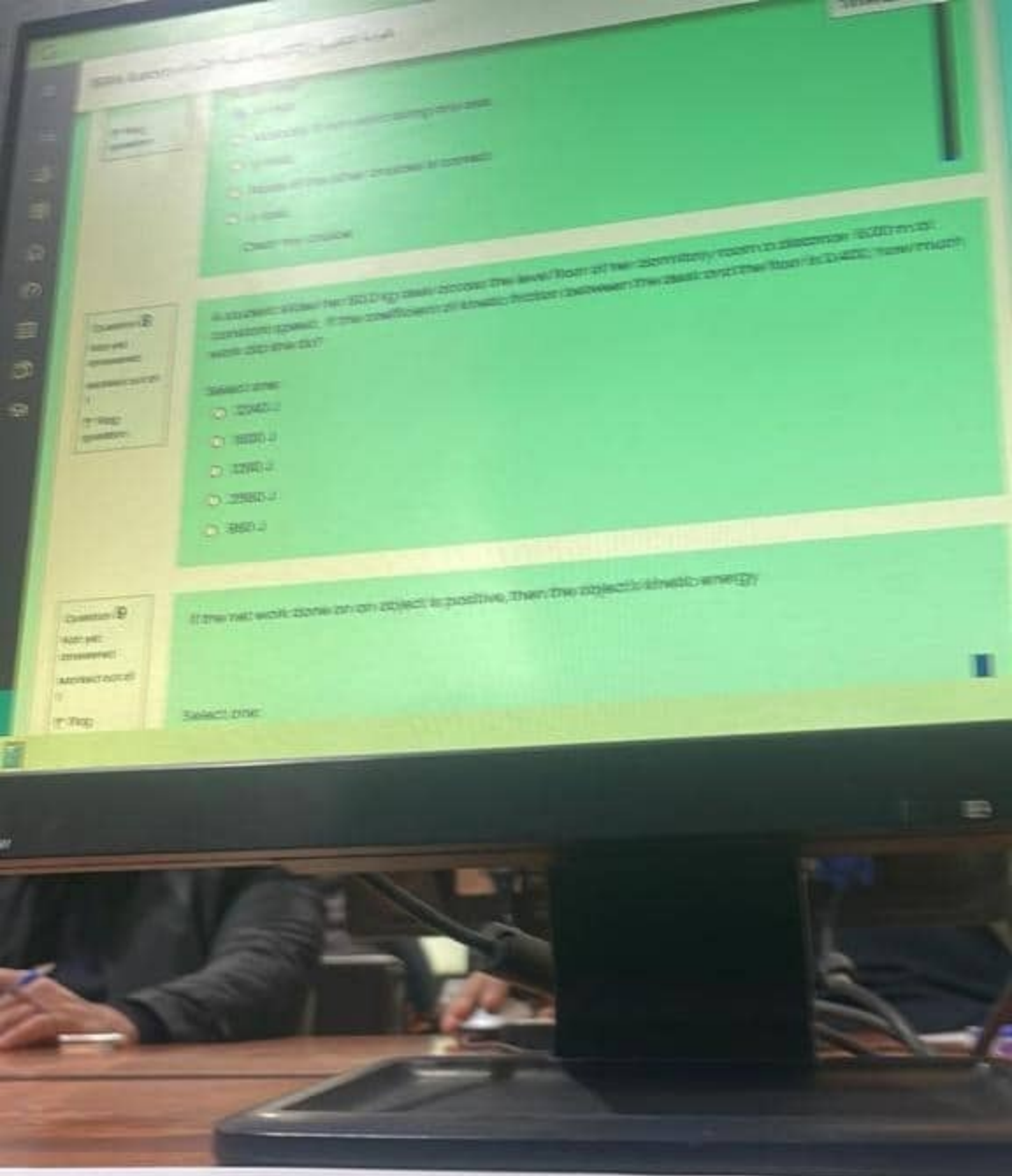
Marked out of 1

Flag question

What force is needed to make an object move in a circle?

Select one:

- static friction
- kinetic friction
- weight
- centripetal force



$n = mg - F_y =$

$20 \times 9{,}8 - 100 \times \sin 20 = 161{,}8$

$60 \times 9{,}8 - 100 \times \sin 30 = 538$

-3 J ○

سؤال 10

غير مجاب عليه بعد

الدرجة من 1.0000

علّم هذا السؤال

A 2.0-kg block initially at rest is pulled to the right along a horizontal, frictionless surface by a constant horizontal force of 15 N. The block's speed after it has moved 5.0 m

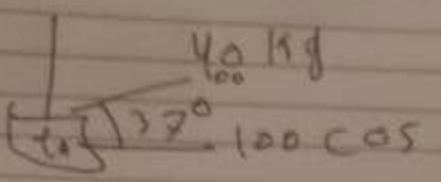
اختر أحد الخيارات

- 10 m/s ○
- 8 m/s ○
- 7 m/s ○
- 15 m/s ○
- 8.7 m/s ○

الصفحة التالية

الصفحة السابقة

100 N / 37°



$ma_N = 100 \cos 37$

$40 a_N = 100 \times \frac{4}{5}$

$a = \frac{80}{40} = 2 m/s^2$

$N + f_y = mg$

$n = mg - f_y = 40 \cdot 9{,}8 - 60{,}182$

$n = 332{,}18 N$

البوابة التعليمية الإلكترونية لجامعة الإسراء ISRA iLearn

1903 N

Question 18
Not yet answered
Marked out of 1
Flag question

The position of an object is given as a function of time as x(t) = (3.00 m/s
the displacement of the object between t = 2.00 s and t = 8.00 s?

Select one:
- 30.0 m
- 138 m
- 76.0 m
- 105 m
- 51.0 m

Question 19
Not yet answered
Marked out of 1
Flag question

Vector M= 4.0 m points eastward and vector N= 2.0 m points westward.
is given by:

Select one:
- 1 m east
- 1 m west
- 2 m east
- 3 m west
- 2 m west

HP LE1901w

سؤال العلم ٣

يسحب طالب صندوقًا من الكتب على أرضية أفقية ناعمة بقوة 100 نيوتن في اتجاه 37 درجة فوق الأفقي. إذا كانت كتلة الصندوق والكتب 60.0 كجم ، فما هي القوة الطبيعية المؤثرة على الصندوق؟

(ز = 9.8 م / ث ^{2})

اختر واحدا:

- شمال 488
- شمال 528
- شمال 648
- شمال 332

السؤال 2

لم تجب بعد

تم تمييزه من 1

Question 7
Answer saved
Marked out of 1
Flag question

The unit vector "j-hat" by definition points along the:

Select one:

- x-axis.
- actually, it can point along any axis.
- y-axis.
- None of the other choices is correct.
- z-axis.

Clear my choice

Question 8
Not yet answered
Marked out of 1
Flag question

A student slides her 80.0 kg desk across the level floor of her dormitory room a dis
constant speed. If the coefficient of kinetic friction between the desk and the floor
work did she do?

Select one:

- 2240 J
- 1600 J
- 1280 J
- 2560 J
- 960 J

HP LE1901w

Question 19
Not yet answered
Marked out of 1
Flag question

Vector M= 4.0 m points eastward and vector N= 2.0 m points westward. The resulta
is given by:

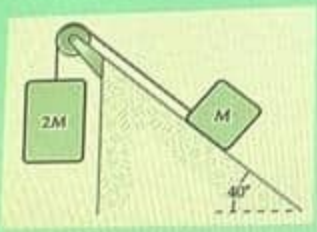
Select one:

- 1 m east
- 1 m west
- 2 m east
- 3 m west
- 2 m west

Clear my choice

Question 20
Not yet answered
Marked out of 1
Flag question

In the figure shown, the coefficient of kinetic friction between the block and the incline is 0.10. What is the magnitude of the acceleration of the suspended block as it



HP LE1901w

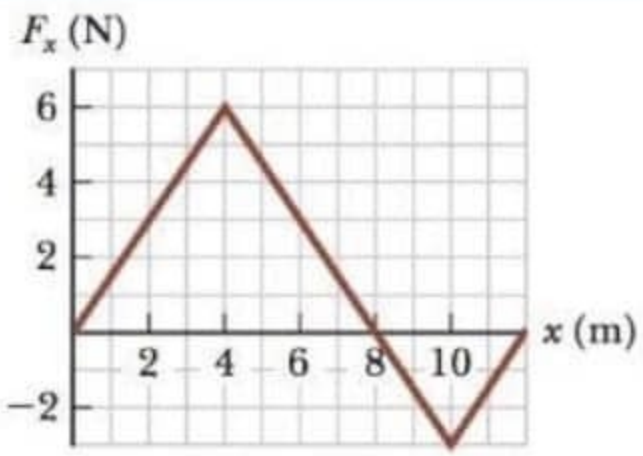
سؤال 9

غير مجاب عليه بعد

الدرجة من 1.0000

علّم هذا السؤال

A force acting on a particle varies with x as shown in the figure. Calculate the work done by the force on the particle as it moves from x = 8.0 to x = 10.0 m.



6 J

5 J

3 J

there is no answer

-3 J

سؤال 10

Clear my choice

Question 8
Not yet answered
Marked out of 1
Flag question

A student slides her 80.0 kg desk across the level floor of her dormitory room constant speed. If the coefficient of kinetic friction between the desk and th work did she do?

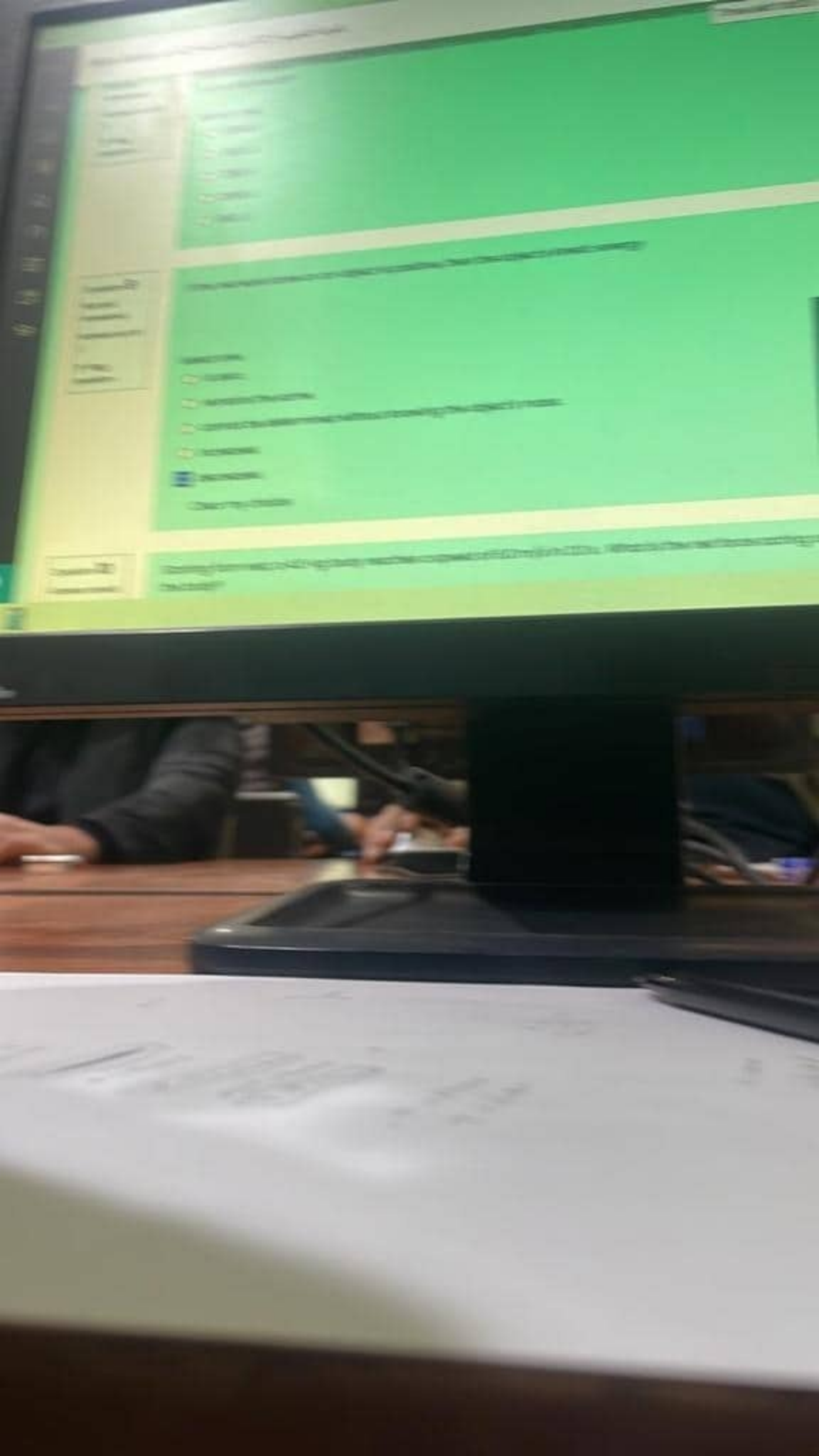
Select one:

- 2240 J
- 1600 J
- 1280 J
- 2560 J
- 960 J

Question 9
Answer saved
Marked out of 1

If the net work done on an object is positive, then the object's kinetic energy

HP LE1901w



Flag question

Using the definition of the scalar product, find the angles between $\mathbf{A} = 3\,\mathbf{i} + 2\,\mathbf{j}$ and $\mathbf{B} = 7\,\mathbf{i} - 4\,\mathbf{k}$

- 42°
- 46°
- 49°
- 44°
- 54°

Question 2

Not yet answered

Marked out of 1

Flag question

Given $\mathbf{M} = 6\,\mathbf{i} + 2\,\mathbf{j} - \mathbf{k}$ and $\mathbf{N} = 2\,\mathbf{i} + \mathbf{j} + 3\,\mathbf{k}$, calculate

the magnitude of M x N

Question 1

Not yet answered

Marked out of 1.000

Flag question

A freely falling object requires 2.00 s to travel the last 50.0 m before it hits the ground. From what height above the ground did it fall?

($g = 10\ m/s^2$)

- 61 m
- 160 m
- 226 m
- 65 m
- 305 m

Question 2

Not yet answered

Marked out of 1.000

Flag question

○ N

○ kg m/s

Clear my choice

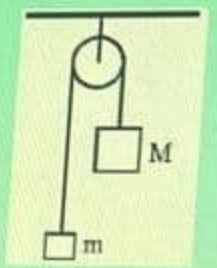
Question 23

Not yet answered

Marked out of 1

Flag question

In the Atwood machine shown in the following Figure, if M = 0.70 kg and m = 0.40 kg and the mass of the pulley. Calculate the magnitude of the acceleration of the syst



Select one:

○ 3.3 m/s²

LE1901w

ed out of

on

$A_x = -12.0$ m and $A_y = 10.0$ m. What is the magnitude of vector ?

Select one:

- 14.4 m
- 13.7 m
- 15.0 m
- 15.6 m
- 13.4 m

5

ed

of

Action-reaction forces are:

Select one:

- unequal in magnitude but point in the same direction.
- equal in magnitude but point in opposite directions.
- None of the other choices is correct.
- unequal in magnitude and point in opposite directions

فيزياء عامة (1)

Home My courses (1) فيزياء عامة المتحف الافتراضي 2022-2-9 الاربعاء (3+2+1) (الشعبة) 2021/2022 الامتحان النهائي للفصل الاول

Time left 0:36:32

Question 1
Answer saved
Marked out of 1
Flag question

The net work done by a conservative force on an object around any closed path is

Select one:
- zero
- negative
- None of the other choices is correct.
- unknown – it depends on the situation
- positive

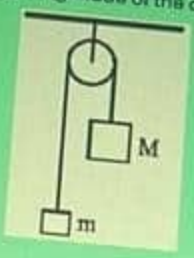
Clear my choice

Question 2
Answer saved
Marked out of
Flag question

A constant force of 20.0 N is applied to an object of mass 8.00 kg at an angle of 25° with the horizontal. What is the work done by this force on the object if it causes a displacement of 7.00 m along the horizontal direction?

Select one:
- 109 J

following Figure, if M = 0.70 kg and m = 0.40 kg. Ignore friction mass of the pulley. Calculate the magnitude of the acceleration of the system.



Select one:

- 3.3 m/s²
- 1.1 m/s²
- 2.7 m/s²
- 3.8 m/s²
- 2.0 m/s²

A person carries a mass of 10 kg and walks along the +x-axis for a distance of 100m with a constant velocity of 2 m/s. What is the work done by this person?

Question 1

Not yet answered

Marked out of 1.00

Flag question

A ball was thrown upward with an initial velocity of 30 m/s, after what time (in s) does it reach the maximum height? **Note: Consider $g = 10\ m/s^2$**

Select one:

- 3
- 0.33
- 2
- 2.5
- 1.5

Question 2

Not yet answered

Marked out of 1.00

Flag question

A particle moves with constant acceleration on the x-axis. If its initial velocity is 10 m/s, and its

Question 12
Not yet answered
Marked out of 1
Flag question

A car enters a 300-m radius flat curve on a rainy day when the coefficient of static friction between its tires and the road is 0.600. What is the maximum speed which the car can travel around the curve without sliding?

Select one:

- 22.4 m/s
- 38.7 m/s
- 31.6 m/s
- 50.0 m/s
- 44.7 m/s

Question 13
Answer saved
Marked out of 1
Flag question

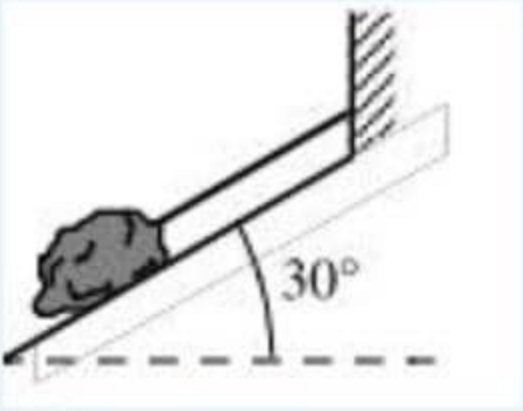
What is the SI unit for mass?

Select one:

- stone
- Newton
- kilogram
- gram
- meter

A rope as shown holds a 40 kg rock at rest on a frictionless inclined plane as shown. Determine the tension in the rope.

Note: $g=9.80\ m/s^2$



Select one:

- 8.5 N
- 9.8 N
- 339.5 N
- 392 N
- 196 N

السؤال 2

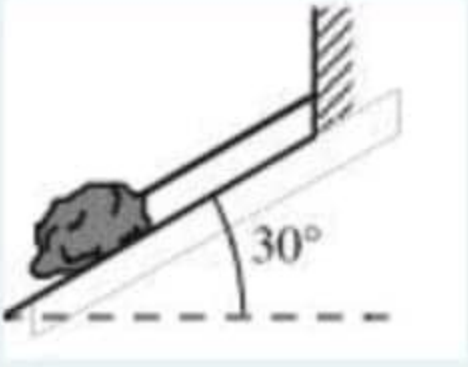
لم تجب بعد

تم تمييزه من 1

سؤال العلم ٣

الحبل كما هو موضح يحمل صخرة بوزن 25 كجم عند السكون على مستوى مائل عديم الاحتكاك كما هو موضح. أوجد قوة الشد في الحبل.

ملحوظة: ز = 9.80 م / ث ^{2}



اختر واحدا:

- شمال 9.8
- شمال 8.5
- شمال 245
- شمال 212
- شمال 122.5

محاولة الإنهاء ...

Marked out of 1

Flag question

A student pulls a box of books on a smooth horizontal floor with a force of 100 N in a direction of 37° above the horizontal. If the mass of the box and the books is 40.0 kg, what is the normal force on the box? ($g=9.8\ m/s^2$)

Select one:

- 392 N
- 332 N
- 292 N
- 312 N

Question 2

Not yet answered

Marked out of 1

Flag question

A rope as shown holds a 40 kg

Time left 0:47

- -200 J
- -160 J
- -80.0 J
- -40.0 J

Clear my choice

A 800 kg car is going around a curve with a radius of 120 m that is banked at an angle of 25.0° with a speed of 30.0 m/s. The coefficient of static friction between the car and the road is 0.300. What is the force exerted by friction on the car?

Select one:

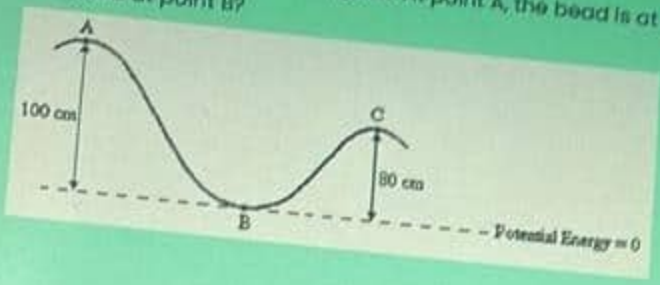
- 1631 N
- 1359 N
- 1088 N
- 2175 N
- 1903 N

The position of an object is given as a function of time as $x(t) = (3.00\ m/s)t + (2.00\ m/s^2)t^2$. What is the displacement of the object between t = 2.00 s and t = 8.00 s?

Select one:

- 30.0 m

What is the speed of the bead at point B?



lect one:

- 44.7 m/s
- 20.0 m/s
- 4.47 m/s
- 200 m/s
- 14.1 m/s

Clear my choice

Finish attempt ...

Next activity

2020/2021 شعبة 1+شعبة 2(د.نذير القادري+د.محمد ابو السيد)

سؤال 1

غير مجاب عليه بعد

الدرجة من 1.0000

علّم هذا السؤال

An automobile moving along a straight track changes its velocity from 40 m/s to 80 m/s in a distance of 200 m. What is the (constant) acceleration of the automobile during this time?

اختراحد الخيارات

- 12 m/s
- 0.20 m/s
- 8.0 m/s
- 6.9 m/s
- 9.6 m/s

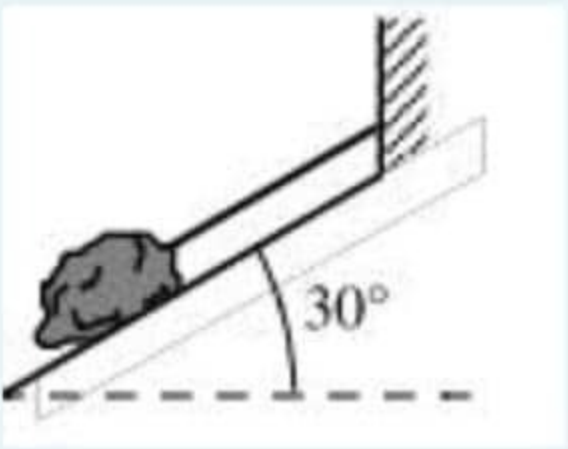
سؤال 2

غير مجاب عليه بعد

سؤال العلم ٢

الحبل كما هو موضح يحمل صخرة بوزن 25 كجم عند السكون على مستوى مائل عديم الاحتكاك كما هو موضح. أوجد قوة الشد في الحبل.

ملحوظة: ز = 9.80 م / ث ^{2}



اختر واحدا:

- شمال 212
- شمال 9.8
- شمال 8.5
- شمال 122.5
- شمال 245

Time left

...ject around any closed path is

- zero
- negative
- None of the other choices is correct.
- unknown – it depends on the situation
- positive

Clear my choice

A constant force of 20.0 N is applied to an object of mass 8.00 kg at an angle of 25° with the horizontal. What is the work done by this force on the object if it causes a displacement of 7.00 m along the horizontal direction?

Select one:

- 109 J
- 72.5 J
- 90.6 J
- 54.4 J
- 127 J

Clear my choice

(1)

Time left

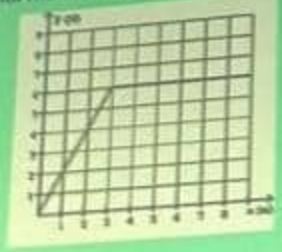
Question 9

Not yet answered

Marked out of 1

Flag question

The force on an object as a function of position is shown in the figure. Determine the amount of work done by this force on an object that moves from x = 0.0 m to x = 5.0 m.



Select one:

- 33 J
- 27 J
- 39 J
- 15 J
- 21 J

واجب بيتي يضاف الى الامتحان النصفي (شعبة1+2+3)

Question 1

Not yet answered

Marked out of 1

Flag question

A student pulls a box of books on a smooth horizontal floor with a force of 100 N in a direction of 37° above the horizontal. If the mass of the box and the books is 40.0 kg, what is the normal force on the box?

($g=9.8\ m/s^2$)

Select one:

- 332 N
- 292 N
- 392 N
- 312 N

Question 2

Not yet answered

Marked out of 1

Flag question

A rope as shown holds a 25 kg rock at rest on a frictionless inclined plane as shown. Determine the tension in the rope.

Note: $g=9.80\ m/s^2$

واجب بيتي يضاف الى الامتحان النصفي (شعبة1+2+3)

Opened: Sunday, 16 January 2022, 8:00 PM
Closes: Sunday, 16 January 2022, 10:00 PM

Password: 1122

Attempts allowed: 1

To attempt this quiz you need to know the quiz password

Summary of your previous attempts

State	Marks / 2	Grade / 10	Review
Finished Submitted Sunday, 16 January 2022, 8:21 PM	2	10	

Your final grade for this quiz is 10/10.

No more attempts are allowed

Back to the course

Question 2

Not yet answered

Marked out of 1

Flag question

At t = 0, a particle leaves the origin with a velocity of 12 m/s in the positive y-direction and moves in the xy plane with a constant acceleration of $(2\,\mathbf{i} - 4\,\mathbf{j})$ m/s^2. At the instant the x coordinate of the particle is 16 m, what is the speed of the particle?

- 8.94 m/s
- 9.43 m/s
- 10.0 m/s
- 10.6 m/s
- 8.54 m/s

Finish attempt ...

فيزياء عامة (١)

واجب بيتي يضاف الى الامتحان النصفي (شعبة 1 + 2 + 3).

السؤال 1
لم تجب بعد
تم تعيينه من 1
سؤال العلم ٣

يسحب طالب صندوقًا من الكتب على أرضية أفقية ناعمة بقوة 100 نيوتن في اتجاه 37 درجة فوق الأفقي. إذا كانت كتلة الصندوق والكتب 40.0 كجم ، فما هي القوة الطبيعية المؤثرة على الصندوق؟ (ز = 9.8 م / ث ^{2})

اختر واحدا:

- شمال 332
- شمال 292
- شمال 392
- شمال 312

السؤال 2
لم تجب بعد
تم تعيينه من 1
سؤال العلم ٣

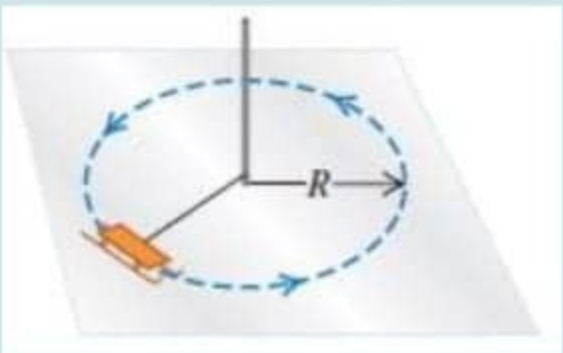
سؤال 8

غير مجاب عليه بعد

الدرجة من 1.0000

علّم هذا السؤال

A sled with a mass of 25.0 kg rests on a horizontal sheet of essentially frictionless ice. It is attached by a 3.00-m rope to a post set in the ice. Once given a push, the sled revolves uniformly in a circle around the post as shown in the figure. If the sled makes five complete revolutions every 60 s, find the force *F* exerted on it by the rope.



- 34.3 N
- 20.5 N
- 15.5 N
- there is no answer
- 30.5 N

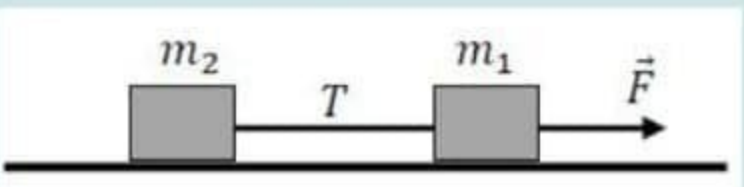
سؤال 6

غير مجاب عليه بعد

الدرجة من 1.0000

علّم هذا السؤال

Two boxes with masses m_1= 4 kg and m_2=8 kg are placed on a frictionless horizontal surface and pulled with a Force F_P =60N. Assume the string between doesn't stretch and is massless. the acceleration of the boxes is (in m/s^2) :



- there is no answer
- 31
- 5
- 15
- 6

سؤال 7

غير مجاب عليه بعد

الدرجة من 1.0000

Not yet answered

Marked out of 1.000

Flag question

Time left 0:30:04

A freely falling object requires 2.00 s to travel the last 40.0 m before it hits the ground. From what height above the ground did it fall?

($g = 10\ m/s^2$)

- 160 m
- 226 m
- 45

45 m

- 106 m
- 305 m

Finish attempt ...

Previous activity

← Ch.2 Motion in one Dimension

Jump to...

$$v^2 = g * r * \text{Coeff. of fric}$$

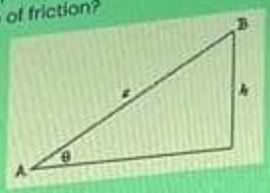
$$= 9{,}8 * 300 * 0{,}6$$

$$\sqrt{v^2} = \sqrt{1764}$$

$$= 42$$

Question 16
Not yet answered
Marked out of 1
Flag question

An object of mass 4.00 kg starts at ... shown in the following figure. If the speed of the object at ... how much work is done by the force of friction?



Select one:

- -120 J
- -200 J
- -160 J
- -80.0 J
- -40.0 J

Question 17
Not yet answered
Marked out of 1
Flag question

A 800 kg car is going around a curve with a radius of 120 m that is banked at an ang... speed of 30.0 m/s. The coefficient of static friction between the car and the road is ... force exerted by friction on the car?

Select one:

- 1631 N
- 1359 N

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out of

Select one:

- is zero.
- remains the same.
- cannot be determined without knowing the object's mass.
- increases.
- decreases.

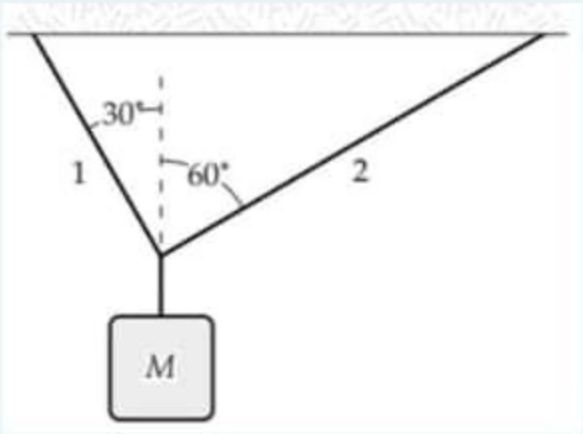
Clear my choice

Starting from rest, a 4.0-kg body reaches a speed of 6.0 m/s in 2.0 s. What is the net force acti
the body?

Marked out of 1

Flag question

If M = 8.0 kg, what is the tension in string 1?
(g= 10 m/s^2)



- 78 N
- 87 N
- 43 N
- 61 N
- 69 N

Question 2

Not yet answered

Marked out of 1

Flag question

At t = 0, a particle leaves the origin with a velocity of 12 m/s

Question 14
Not yet answered
Marked out of 1
Flag question

A vector has components $A_x = 12.0$ m and $A_y = 10.0$ m. What is the mag

Select one:
- 14.4 m
- 13.7 m
- 15.0 m
- 15.6 m
- 13.4 m

Question 15
Not yet answered
Marked out of 1
Flag question

Action-reaction forces are:

Select one:
- unequal in magnitude but point in the same direction.
- equal in magnitude but point in opposite directions.
- None of the other choices is correct.

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Marked out of 1

Flag question

Select one:

- 14.4 m
- 13.7 m
- 15.0 m
- 15.6 m
- 13.4 m

Question 15

Not yet answered

Marked out of 1

Flag question

Action-reaction forces are:

Select one:

- unequal in magnitude but point in the same direction.
- equal in magnitude but point in opposite directions.
- None of the other choices is correct.
- unequal in magnitude and point in opposite directions.
- equal in magnitude and point in the same direction.

Question 2

Not yet answered

Marked out of 1.000

Flag question

The height of a helicopter above the ground is given by $h = 3.0\ t^2$, where h is in meters and t is in seconds. After 5.0 s, the helicopter releases a small mailbag. How long after its release does the mailbag reach the ground?

($g = 10\ m/s^2$)

- 3.1 s
- 6.3 s
- 9.5 s
- 4.7 s
- 7.9 s

Finish attempt ...

Previous activity

← Ch.2 Motion in one Dimension

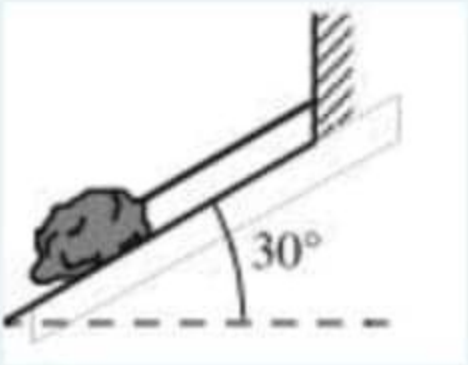
Not yet answered

Marked out of 1

Flag question

A rope as shown holds a 25 kg rock at rest on a frictionless inclined plane as shown. Determine the tension in the rope.

Note: g=9.80 m/s²



Select one:

- 9.8 N
- 8.5 N
- 245 N
- 212 N
- 122.5 N

Finish attempt ...

Previous activity

← خطة المادة

Jump to...

15

6

سؤال 7

غير مجاب عليه بعد

الدرجة من 1.0000

علّم هذا السؤال

A sled weighing 500 N is pulled along a flat surface. The coefficient of static friction is 0.2, and the coefficient of kinetic friction is 0.05. The force needed to start the sled moving

75 N

50 N

25 N

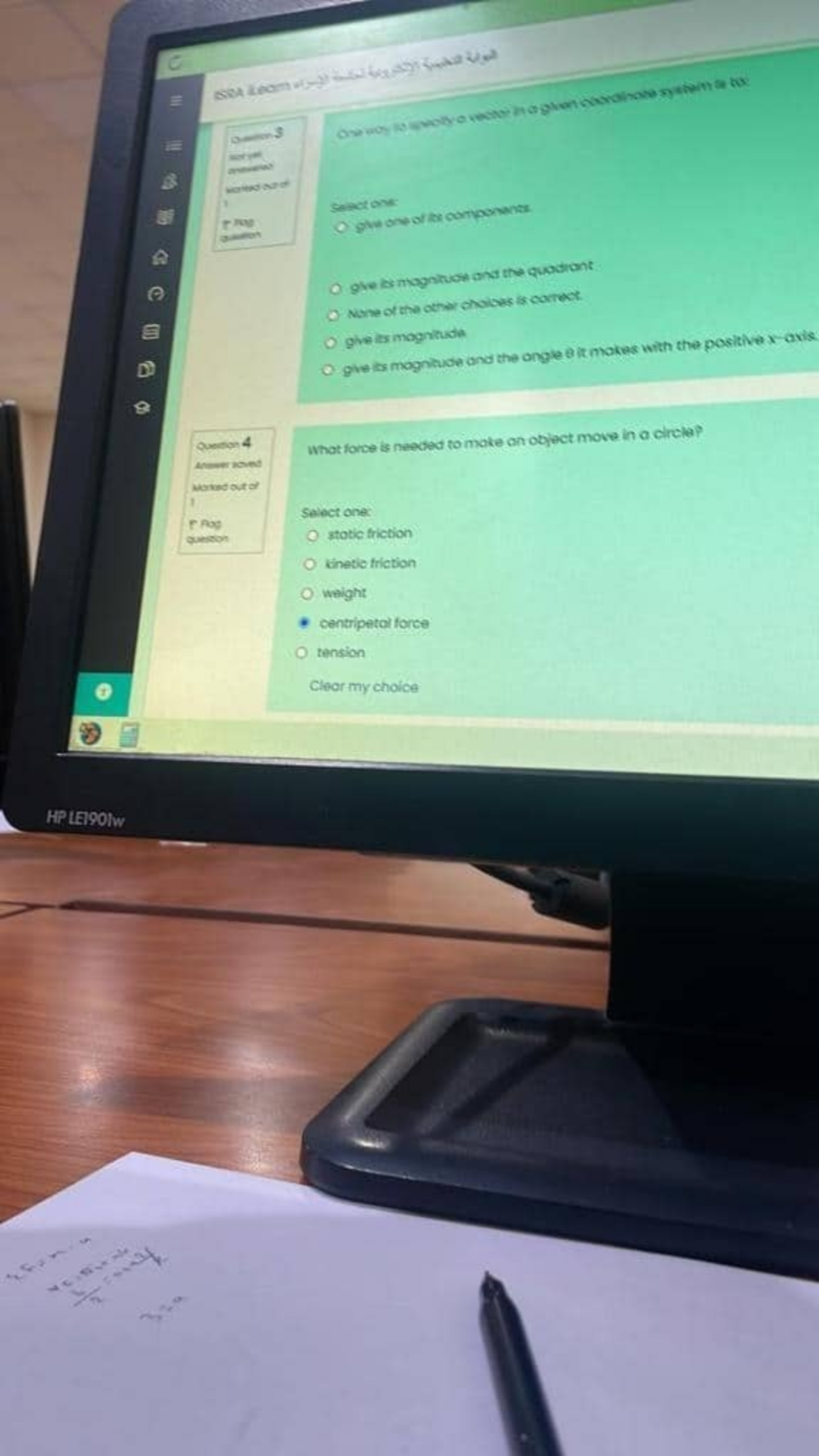
there is no answer

80 N

سؤال 8

غير مجاب عليه بعد

الدرجة من 1.0000


Question 3
Not yet answered
Marked out of 1
Flag question
One way to specify a vector in a given coordinate system is to:
Select one:
give one of its components
give its magnitude and the quadrant
None of the other choices is correct
give its magnitude
give its magnitude and the angle θ it makes with the positive x- axis
Question 4
Answer saved
Marked out of 1
Flag question
What force is needed to make an object move in a circle?
Select one:
static friction
kinetic friction
weight
centripetal force
tension
Clear my choice
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Question 11
Not yet answered
Marked out of 1
Flag question

A runner leaves the starting blocks and accelerates at 2.60 m/s² for 7.00 s. What runner reach?

Select one:
- 18.2 m/s
- 15.6 m/s
- 13.0 m/s
- 20.8 m/s
- 23.4 m/s

Question 12
Not yet answered
Marked out of 1
Flag question

A car enters a 300-m radius flat curve on a rainy day when the coefficient of static fri its tires and the road is 0.600. What is the maximum speed which the car can travel a without sliding?

Select one:
- 22.4 m/s
- 38.7 m/s
- 31.6 m/s
- 50.0 m/s
- 44.7 m/s

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Question 2

Not yet answered

Marked out of 1.00

Flag question

A particle moves with constant acceleration on the x-axis. If its initial velocity is 10 m/s, and its final velocity after 5 s is 40 m/s, what is its acceleration (in m/s^2)?

Select one:

- 20
- 5
- 6
- 4
- 3

Finish attempt ...

Previous activity

← Ch.2 Motion in one Dimension