



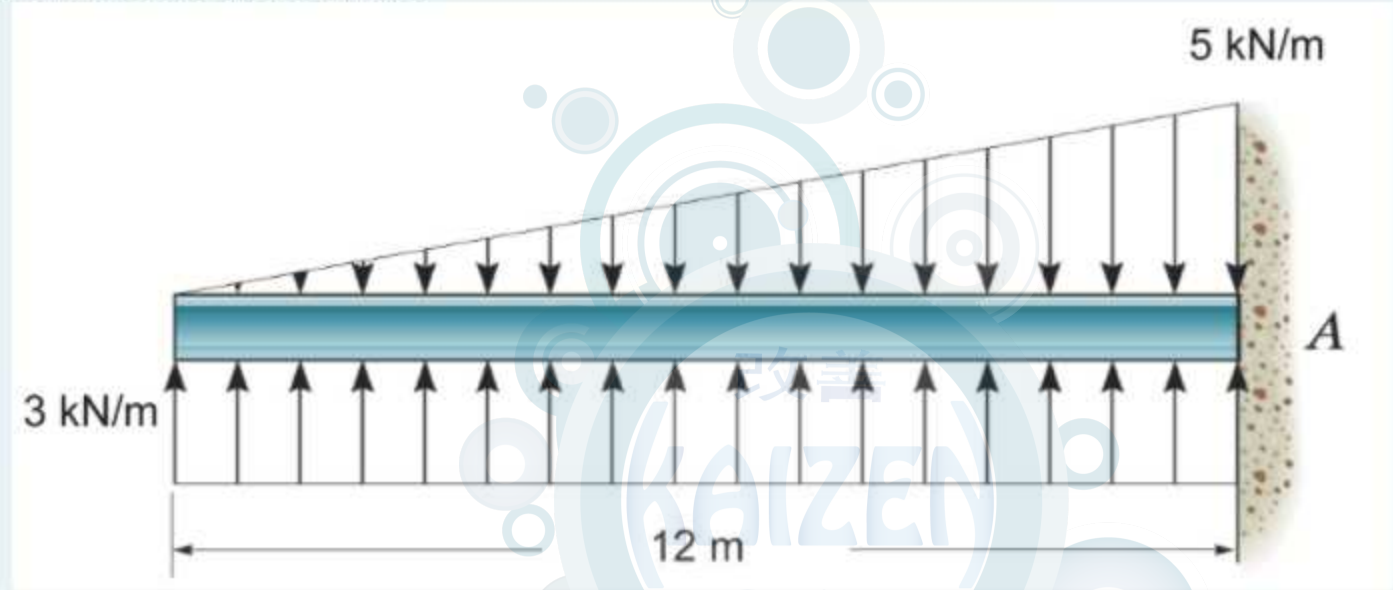
Time left 0:52:54

-
-
-
-
-

[Finish attempt ...](#)

Question 1
Not yet answered
Marked out of 10.00
[Flag question](#)

In this figure, the values for the bending moment and the shear force at $x = 1$, measured from the left side of the beam are:



- a. $M = 5.4 \text{ kN.m}$ and $v = 5.1 \text{ kN}$
- b. $M = 11.6 \text{ kN.m}$ and $v = 7.1 \text{ kN}$
- c. $M = 1.4 \text{ kN.m}$ and $v = 5.1 \text{ kN}$
- d. $M = 19.5 \text{ kN.m}$ and $v = 8.6 \text{ kN}$
- e. $M = 5.4 \text{ kN.m}$ and $v = 2.8 \text{ kN}$
- f. $M = 1.4 \text{ kN.m}$ and $v = 2.8 \text{ kN}$

[Clear my choice](#)



Finish attempt ...

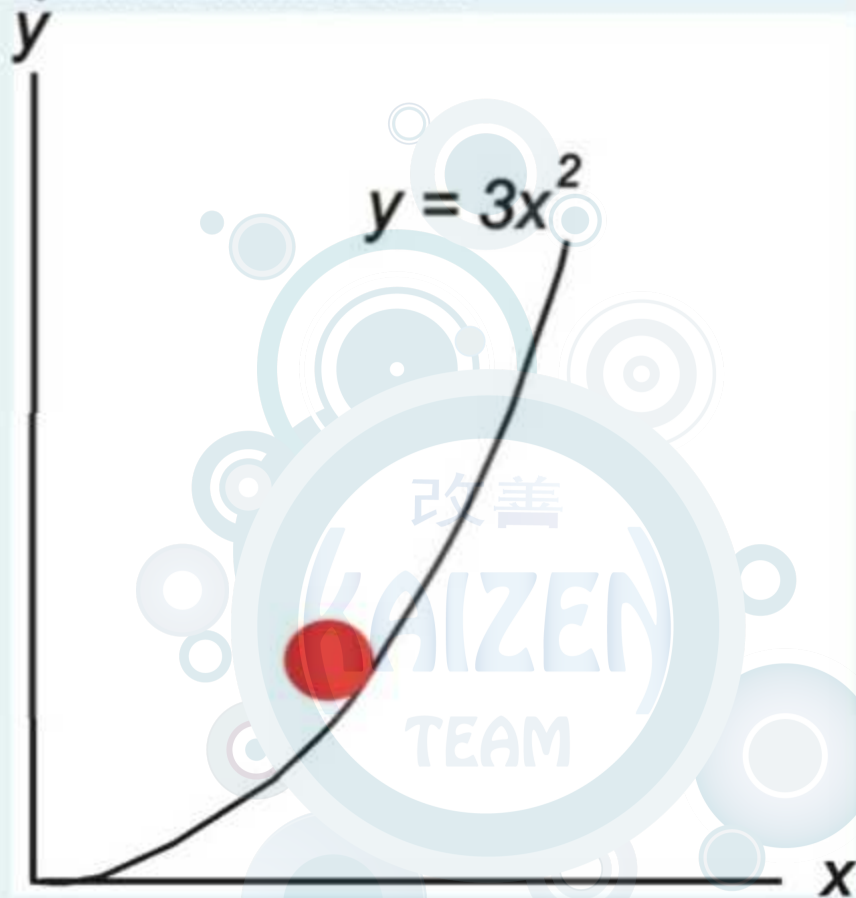
Question 2

Not yet answered

Marked out of 10.00

Flag question

A ball with no size is sliding down along the path shown in the figure. The speed of the ball was 15 m/s at an x position of 0.5 m. If you know that its speed increases by 30 m/s^2 , calculate the magnitude of the ball's acceleration at this instant.



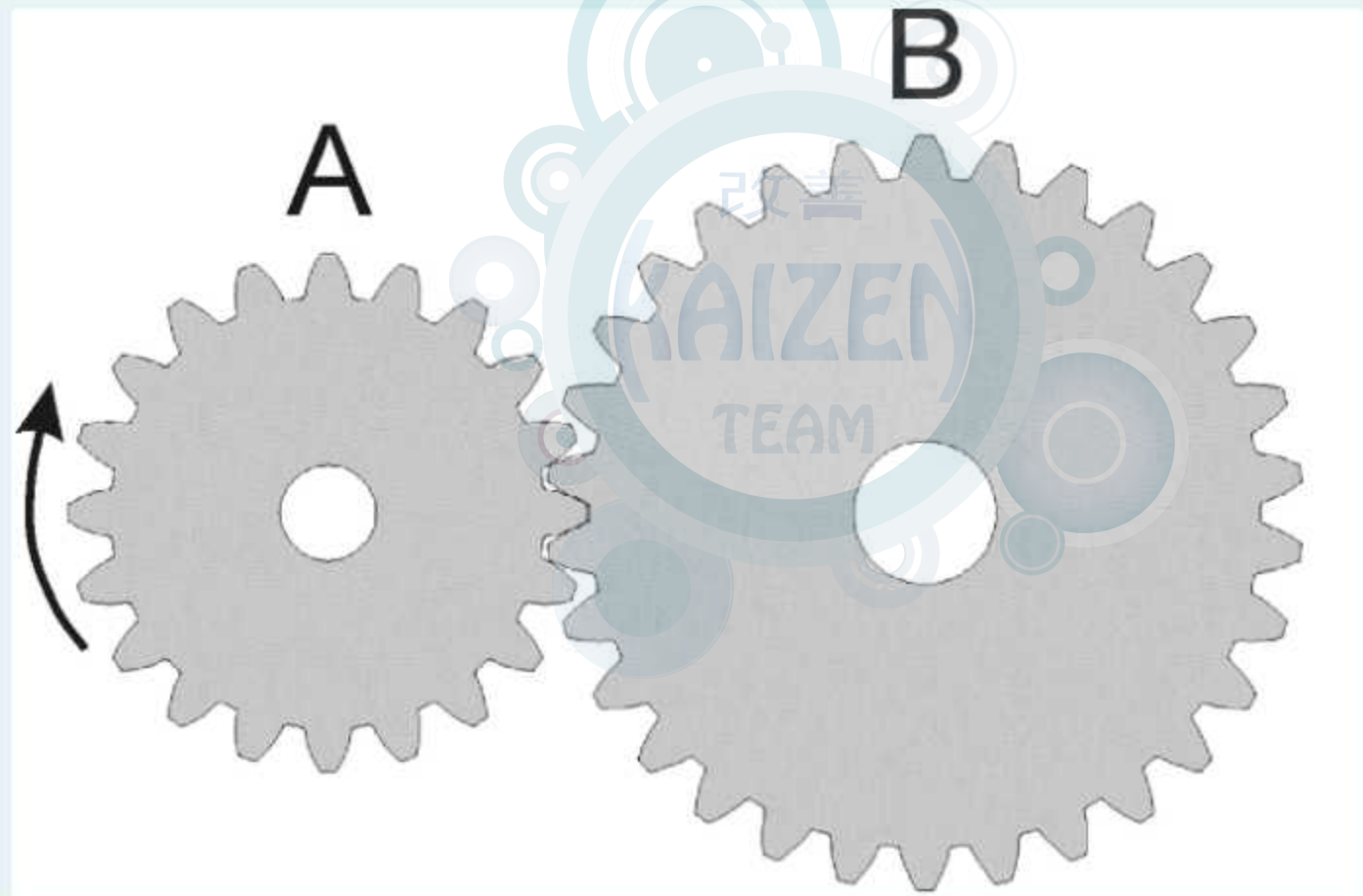
- a. $a = 15.3 \text{ m/s}^2$
- b. $a = 52.2 \text{ m/s}^2$
- c. $a = 8.48 \text{ m/s}^2$
- d. $a = 305.1 \text{ m/s}^2$
- e. $a = 464.2 \text{ m/s}^2$

Clear my choice

Time left 0:36:17

Question 3
Not yet answered
Marked out of 10.00
Flag question

Gear A with a radius of 100 mm is attached to a motor that causes it to rotate at an angular acceleration of $\alpha_A = 1 + 0.003 \theta^2 \text{ rad/s}^2$. Determine the angular velocity of gear B (having a radius of 255 mm) after it experiences an angular displacement $\theta_A = 30 \text{ rad}$. Note that the initial angular velocity of gear A equals 20 rad/s.



1 2 3 4 5

Finish attempt ...

Time left 0:10:48

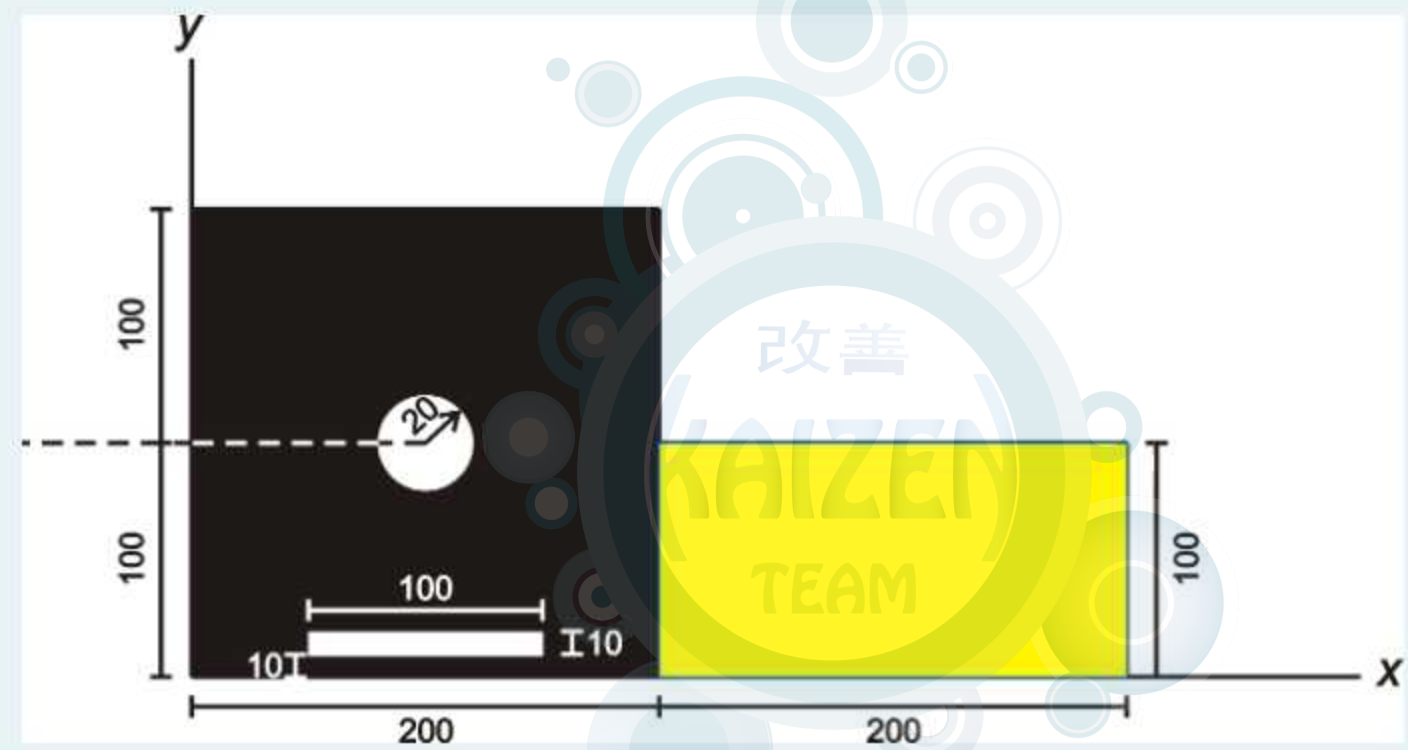
Quiz navigation

- 1
- 2
- 3
- 4
- 5

[Finish attempt ...](#)

Question 4
 Not yet answered
 Marked out of 10.00
 Flag question

Determine the moment of inertia of the area about the x axis.



- a. $I_x = 5.83 (10)^8 \text{ mm}^4$
- b. $I_x = 7.6 (10)^8 \text{ mm}^4$
- c. $I_x = 4.8 (10)^8 \text{ mm}^4$
- d. $I_x = 5.49 (10)^8 \text{ mm}^4$

Time left 0:01:36

Question 5
Not yet answered
Marked out of 10.00
Flag question

Two forces are trying to move the 30 kg table from rest. If $F_1 = 50\text{ N}$ and $F_2 = 100\text{ N}$ in the directions shows, how far would the table move at the instant its speed becomes 1 m/s . Consider a kinetic coefficient of friction between the table and floor of 0.02 .



- a. $s = 0.18\text{ m}$
- b. $s = 0.29\text{ m}$
- c. $s = 0.52\text{ m}$

Quiz navigation

1 2 3 4 5

Finish attempt ...