Rosary School – Marj Elhamam

Name: _____

Date: ____ /____ / 2025

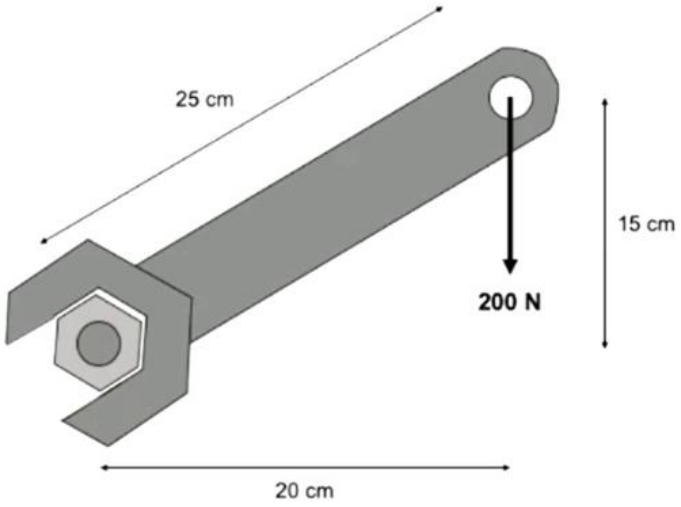
Grade: 8 ( )

Subject: Physics

Worksheet 2: Achievement Test Revision Questions

Question 1:

James is applying a force of 200 N on a spanner to loosen a nut on his table. The dimensions of the spanner are shown on the diagram.



a. State the direction of rotation applied by the 200 N force. **(1)**

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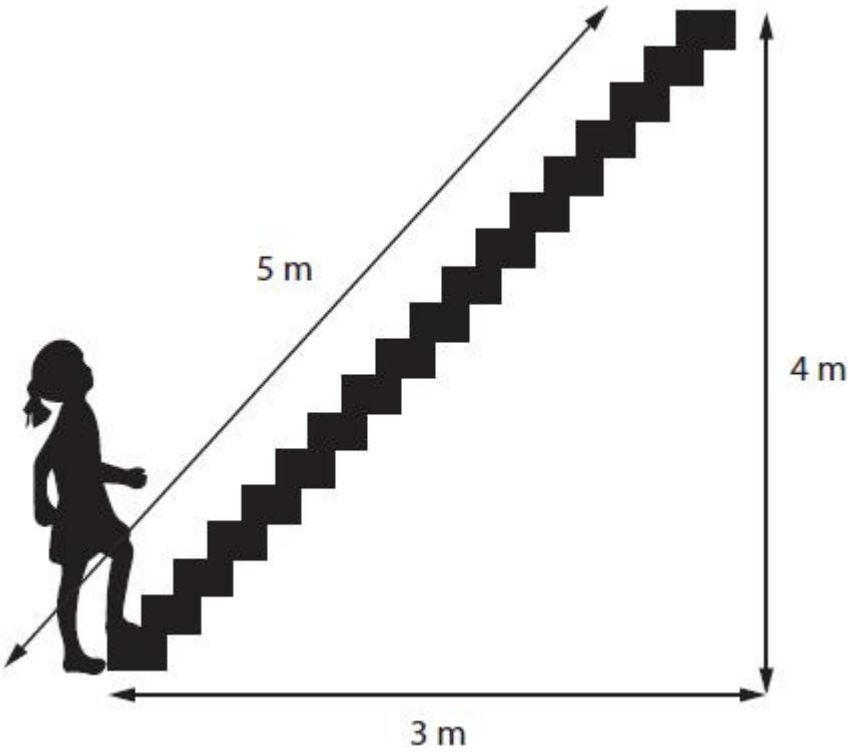
b. Calculate the moment in Nm of the 200 N force about the nut. **(3)**

Question 2:

The dimensions of some stairs are shown in the diagram.



The child in the diagram has a mass of 40 kg.

The gravitational field strength on Earth is 10 N/kg.

a. Calculate the weight of the child.

(2)

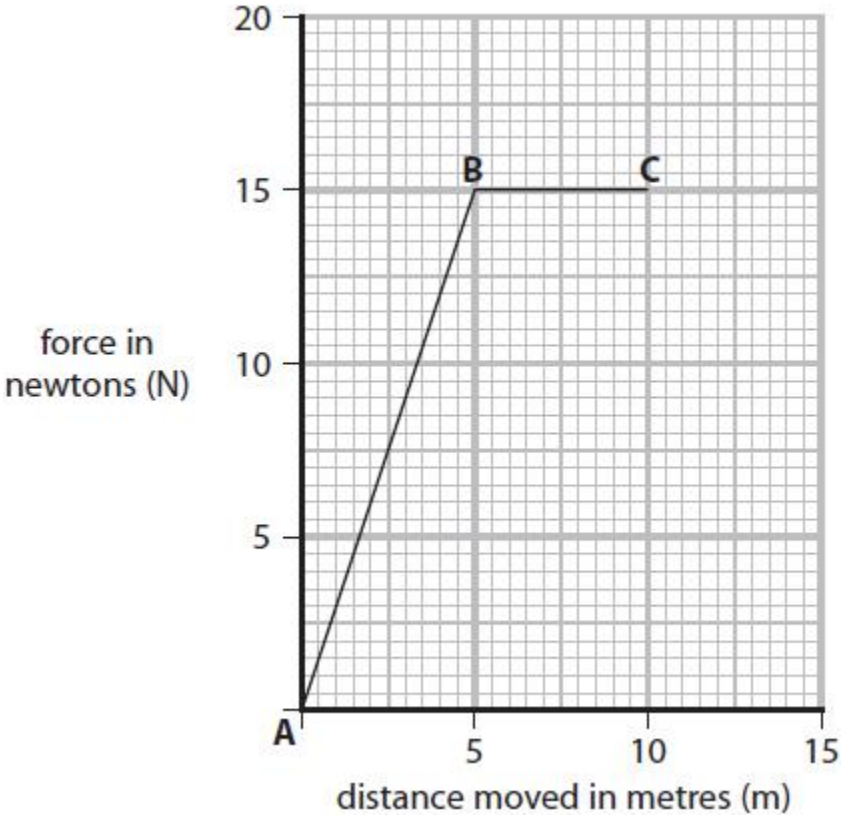
b. When the child climbs the stairs, they do work against gravity.

Calculate the work done by the child when they climb the stairs.

(3)

Question 3:

The graph shows how the force used to move an object changes with the distance the object moves.



The table shows some statements about the work done when moving the object.

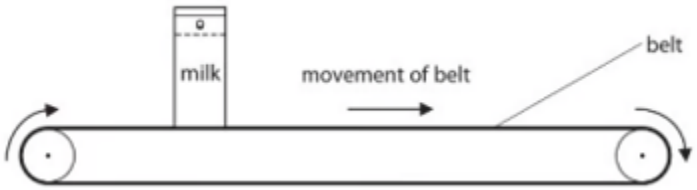
Complete the table by putting **one** tick (✓) in each row to show if each statement is true or false.

Use the relationship: work done = force × distance moved

Statement	True	False
the work done when moving the object from B to C is 75 J		
the work done when moving the object from A to B is equal to the work done in moving the object from B to C		
the work done when moving the object from A to B is half the work done in moving the object from B to C		

Question 4:

Supermarkets use conveyer belts to move shopping at the cash register. The diagram shows a carton of milk being pulled along by a horizontal conveyer belt.



The horizontal force on the carton from the belt is 1.7 N.

The carton moves a distance of 46 cm.

a. Calculate the work done moving the carton. (2)

b. State how much energy is transferred to the carton. (1)

_____

c. What is the final form of energy stored after pulling the carton? (1)

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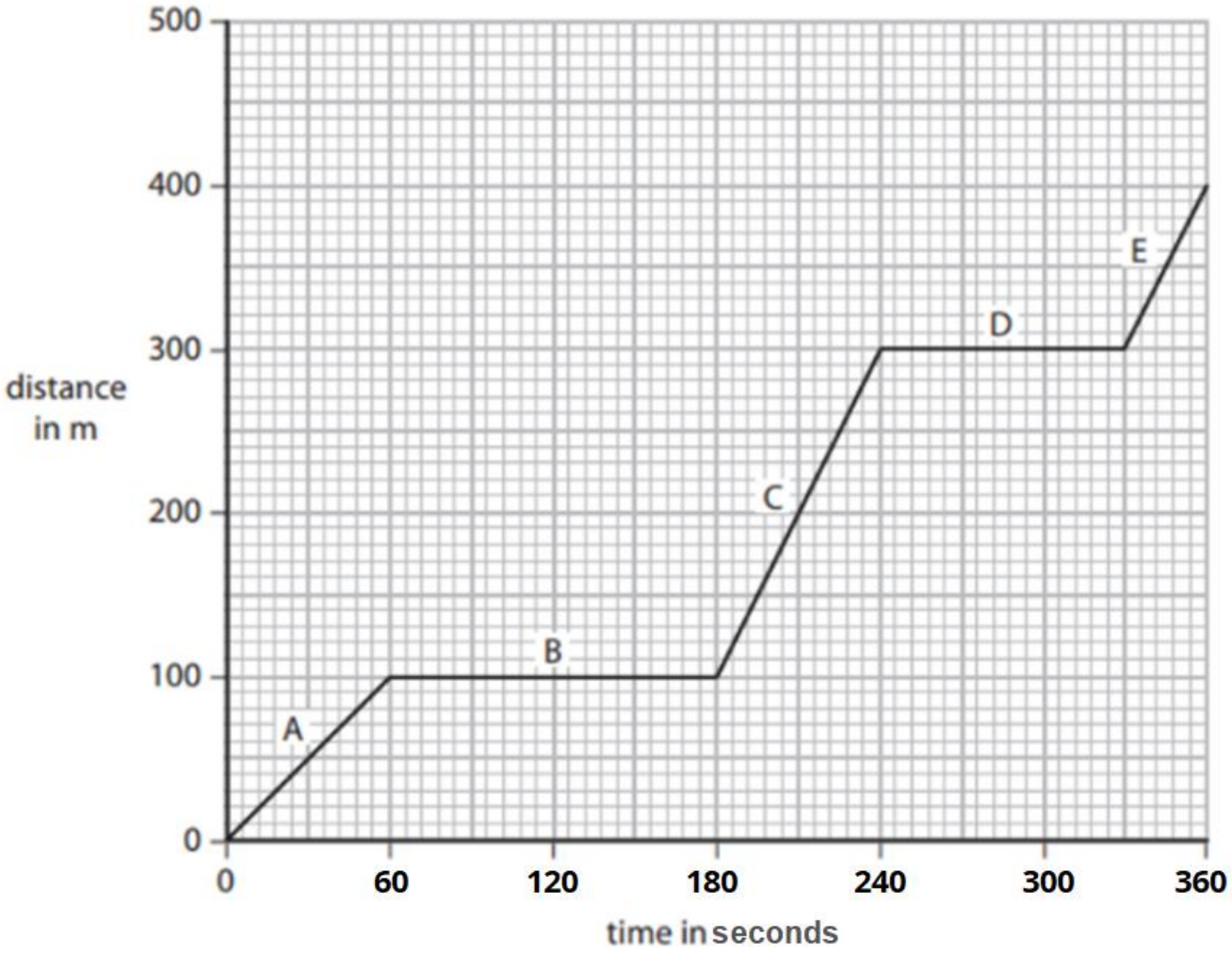
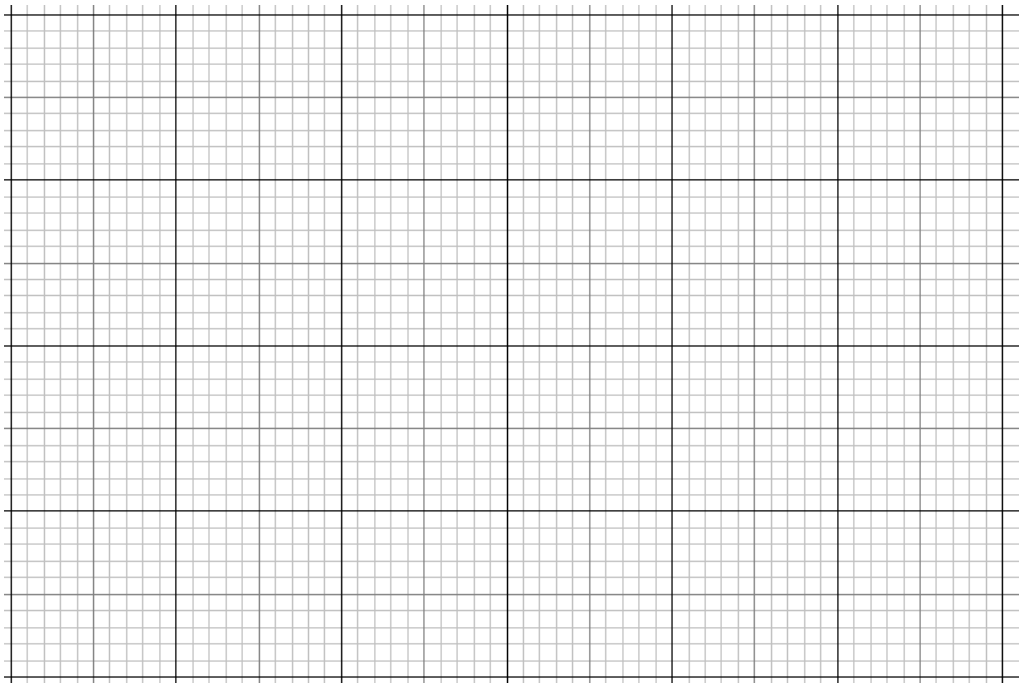
Question 5:

A car travels along a very busy road.

The graph shows how the distance travelled by the car changes in a six - minute period.



a. From the distance – time graph of the car's journey, construct a speed – time graph for the car's journey showing all relevant calculations. (8)



Merry Christmas

Teachers: Zeina Abu Manneh

&

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