

Signature: Name: Marks:

Force Worksheet 2

Q1.

The figure below shows an object with a mass of 6 kg moves at constant velocity when it is pulled by a horizontal force of 4 N on a level surface. What is the acceleration of the object if the object is pulled with a force of 22 N?

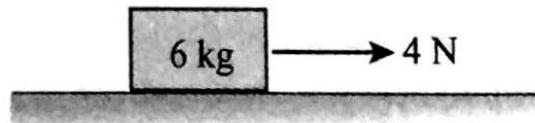


Figure 1.

Q2.

What is the acceleration of the object if the mass is also 6kg?



Figure 2.


A rectangular block is shown on a horizontal surface. An arrow points to the right from the left side of the block, labeled "60 N". Another arrow points to the left from the right side of the block, labeled "30 N".

Figure 3.

Signature: Name: Marks: **Q3.**

The figure below shows three forces acting on a block.

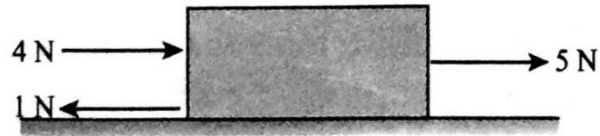


Figure 4.

Q4.

The figure below shows forces 7 N, 4 N and 10 N acting on a point A. Calculate the magnitude of the resultant force acting on point A.

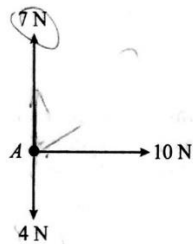


Figure 5.

A large empty rectangular box with a dashed crosshair in the center, intended for drawing a vector diagram.

Signature: Name: Marks: **Q5.**

In the figure below, three forces F_1 , 30N and W are in equilibrium. What are the values for F_1 and W ?

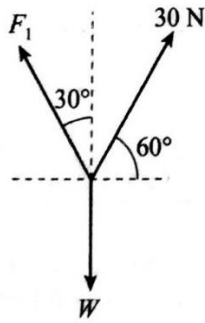


Figure 6

