Question 1:
Newton's Three Laws of Motion:
- First Law: An object will remain at rest or in uniform motion unless acted upon by an external force
- Second Law: Force equals mass times acceleration (F = ma)
- Third Law: Every action has an equal and opposite reaction

Question 2:
To find force:
$F = ma$
$a = (v - u)/t$
$a = (27 - 0)/9$
$a = 3\ m/s^2$
$F = 1500\ kg \times 3\ m/s^2$
$F = 4500\ N$

Question 3:

A simple pendulum moves back and forth in periodic motion. When released from a height, gravity pulls it down, converting potential energy to kinetic energy. At the lowest point, it has maximum kinetic energy and minimum potential energy. As it swings up, kinetic energy converts back to potential energy. The forces acting on the pendulum are gravity (mg) and tension in the string. The tension provides the centripetal force needed for the curved motion while gravity provides the restoring force that keeps the pendulum oscillating.