Formulas:

A= F net ÷ m

F net= ma

F net = ∑ F

W= mg

Acceleration = m ÷s 2

Mass = kg

Weight force = N

Force and Motion

1. Step 1

F net = 5N

M= 50kg

A= ?

A= F net ÷ m

5N ÷50kg= 0.10 m/s2

A= 0.10 m/s2

Step 2

A= 0.10 m/s2

V0=0 m/s

T= 10 s

Vf= ?

Vf= V0 + at

= 0m/s + 0.10 m/s2 × 10s

= 1 m/s

Vf= 1 m/s



-49 N

69 N

4.9 kg

F net= 20 N

A= 4.08 m/s2

10.2 N



-14.7 N

1.47 kg

F net= -14.7 N + 10.2 N

F net= -4.5 N

A= -3.06 m/s2

935 N

FN= 836 N

1. F net= 99N

-836 N

83.6 kg

-836 N

83.6 kg

A= 1.18 m/s2