

Interpret Net Force and Acceleration



Use the matching sheet ID when checking answers.

Use the material to work through each task. Show the requested response.

1. Find net force for mass 2 kg and acceleration 3 m/s².

Answer: 6 N

2. Find acceleration for net force 12 N and mass 4 kg.

Answer: 3 m/s²

3. Two horizontal forces are 10 N right and 6 N left. Find net force.

Answer: 4 N right

4. What is acceleration when net force is zero?

Answer: 0 m/s²

5. With the same net force, what happens to acceleration if mass doubles?

Look for:

- Uses $a = F/m$.

One possible response: Acceleration halves.

6. Does zero net force require an object to be at rest?

Look for:

- Distinguishes velocity from acceleration.

One possible response: No. It can move at constant velocity.

Open responses use criteria and an illustrative response. Other well-supported responses can be acceptable.