**Scales in an Elevator**

A person brings a bathroom scale into an elevator.

For each of the following situation, evaluate whether the relationship between the given forces is less than, greater than, equal to, or can’t tell and explain your reasoning.

1. The elevator is at rest.

 Fscale on man Fgravity on man

 Explanation:

 b. The elevator is moving downward at a constant speed

Fscale on man Fgravity on man

Explanation:

 c. The elevator is moving downward at an increasing speed.

 Fscale on man Fgravity on man

Explanation:

 d. The elevator is moving upward at a decreasing speed.

 Fscale on man Fgravity on man

 Explanation:

 e. The elevator is at rest on the 30th floor.

 Fscale on man Fgravity on man

 Explanation: