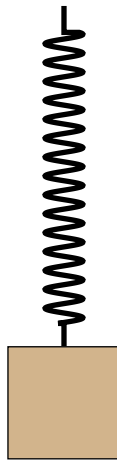


Question 1

A block is suspended from a spring. The block is at rest.

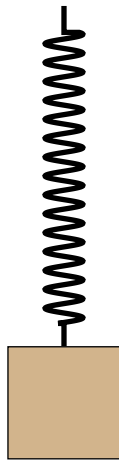


Which of the following is true?

1. The force exerted by the spring is larger than the force exerted by gravity.
2. The force exerted by the spring is smaller than the force exerted by gravity.
3. The force exerted by the spring is the same as the force exerted by gravity.

Question 2

A block is suspended from a spring. The block moves straight up with constant speed.



Which of the following is true?

1. The force exerted by the spring is larger than the force exerted by gravity.
2. The force exerted by the spring is smaller than the force exerted by gravity.
3. The force exerted by the spring is the same as the force exerted by gravity.

Question 3

A cat sits on a chair (whose seat is horizontal). Both are at rest.

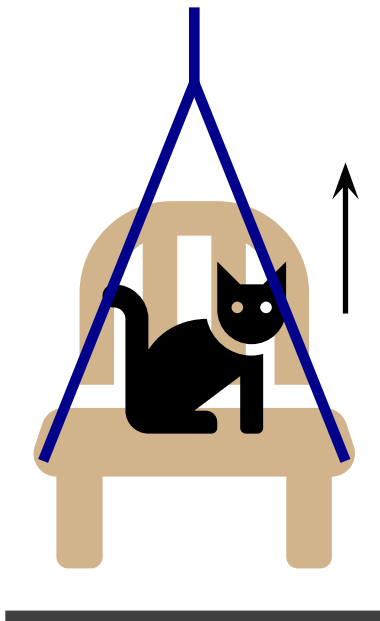


Which of the following is true regarding the normal force exerted by the chair on the cat?

1. The size of the normal force equals that of the gravitational force.
2. The size of the normal force is larger than that of the gravitational force.
3. The size of the normal force is smaller than that of the gravitational force.

Question 4

A cat sits on a chair (whose seat is horizontal). Both move up with a constant speed.

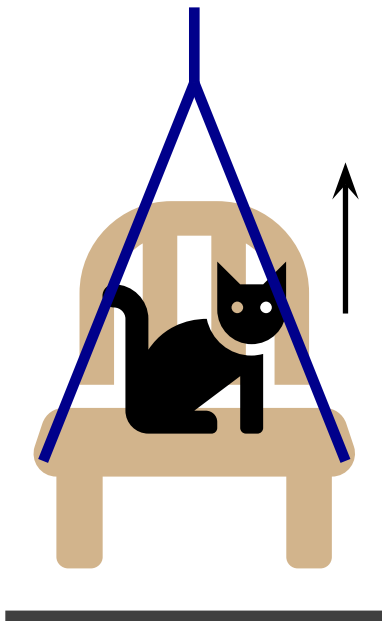


Which of the following is true regarding the normal force exerted by the chair on the cat?

1. The size of the normal force equals that of the gravitational force.
2. The size of the normal force is larger than that of the gravitational force.
3. The size of the normal force is smaller than that of the gravitational force.

Question 5

A cat sits on a chair (whose seat is horizontal). Both move up with a constantly increasing speed.



Which of the following is true regarding the normal force exerted by the chair on the cat?

1. The size of the normal force equals that of the gravitational force.
2. The size of the normal force is larger than that of the gravitational force.
3. The size of the normal force is smaller than that of the gravitational force.