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1. Which affects the centre of gravity of the object?

- A) Weight  
C) Density
- B) Mass**  
D) Shape (Incorrect)

base?

- A)  $4r/5$   
C)  $3r/4$
- B)  $3r/8$  (Correct)**  
D)  $r/2$

2. What is the name of the point at which all the weight of the body concentrated?

- A) Initial point  
C) Centroid
- B) Centre of gravity (Correct)**  
D) Central point

7. What is the centre of gravity of a sphere?

- A) At the centre**  
C) At the diameter (Incorrect)
- B) On the circumference  
D) At the radius

3. Where the centre of gravity of a circle lies?

- A) At its centre (Correct)**  
C) Any where on its circumference
- B) Any where on its radius  
D) Any where on its diameter

8. Which state of equilibrium's example is A cone resting on its tip?

- A) Stable  
**C) Unstable (Correct)**
- B) Neutral  
D) Horizontal

4. What is the centre of gravity of a right circular cone from its base?

- A)  $h/2$   
**C)  $h/4$  (Correct)**
- B)  $h/3$   
D)  $h/5$

9. Which one of the following geometrical shapes centre of gravity lies from its base is  $1/3$  of its height?

- A) Square  
**C) Triangle (Correct)**
- B) Rhombus  
D) Cone

5. What is the centre of gravity of a rectangular body?

- A) Longer side of rectangle  
**C) At the point of intersection of its diagonals (Correct)**
- B) Shorter side of rectangle  
D) At the corners

10. Which state of equilibrium's example is, A cone resting on its base?

- A) Un-stable  
**C) Stable (Correct)**
- B) Neutral  
D) Bothe A and B

6. What is the centre of gravity of a solid hemisphere from its

11. What is the centre of gravity of a semi circle of diameter 12 cm?

- A) 2.24 cm  
C) 3.25 cm
- B) 2.54 cm (Correct)**  
D) 2.75 cm