

A. The same: B. Right side: C. Left side Correct Answer: C.

GPT4o: C left side. The set of strip-like objects on the right has additional structural support in the form of two shorter vertical supports and a horizontal base this added support increases the stability of the structure on the right, making it less likely to fall over. When pushed in contrast, the set of objects on the left lacks any base or additional supports and thus is more susceptible to falling over when pressure is adolled.



These stools are the same height. Which is more likely to tip over when an active child sits on it? Please select from the following choices:

A. Left one;
B. Right one: Correct Answer: A

GPT4o: B right one. The stood on the right is more likely to tip over when an active child sits on it because its legs are splayed at an angle, making the base wider and potentially more stable under normal circumstances but also adding a tipping hazard due to the non-vertical configuration of the legs if the direction of force isn't managed an active child could more easily generate lateral forces that could tip the stool the left stool has straight legs that provide a more direct downward support aligned with the force of gravity, making



Two bridges with different designs: the first bridge is supported by two F vertical pillars; the second bridge has additional cross-bracing between the two pillars for enhanced stability. With a sandbag of equal weight placed on each bridge, which bridge is more likely to withstand collapse? Please answer with A.B. C. and provide an explanation.



. The first bridge; Correct Answer: B

Both bridges are equally stable:

GPT4o: B the second bridge. The second bridge is more likely to withstand collapse because it has additional cross-bracing between the two pillars. Cross-bracing increases the structural integrity and stability of the bridge by distributing loads more effectively and providing resistance against lateral forces.

As shown in the picture, which standing posture is more likely to become tiring after standing for a long time? Please select from the following choices:

A. Left side;
 B. Right side;

Correct Answer: B

GPT4o: b right side. Standing on the toes, as shown on the right side, is more likely to become tiring more quickly than standing flat on the feet this position puts more strain on the muscles in the feet, calves, and ankles, requiring more effort to maintain balance and stability the left side, with feet flat on the ground, provides a more stable and less otherically demandino stance



В

As shown in the picture, between the two types of porcelain objects, which one is more likely to tip over? Please select from the following choices:

The top one;

Correct Answer: B



GPT4o:A the top on. The likelihood of an object tipping over depends on its center of gravity and base width the top porcelain object has a much narrower base and a broader top, which raises its center of gravity and makes it more prone to tipping over in contrast, the bottom porcelain object has a wider base and a more evenly distributed shape, lowerin its center of gravity and making it more stable



In this picture, for the same bottle of cola, which placement method is less likely to roll, the one on top or the one on the bottom? Please select from the following choices:

A. The top one;
The bottom one

Correct Answer: A



GPTác: b the bottom one. The bottom placement has the bottle lying hortzontally, which is less likely by roll compared to the vertical placement (depliced at the top) lacement (depliced at the top) should be about the placed hortzontally, if has a larger area of contact with the surface, which has prevent larger prevent failing to conversely, a vertically standing bottle (as shown in the top image) has a smaller base area in contact with the surface, and is more zerone to tioning and roll singular placement.