



Spatial: Cross-View Matching



Question: In the right-gripper camera view, the item is outlined with a red bounding box. Which colored bounding box encloses that same item in the left-gripper camera view and the head camera view?

Answer: The pink bounding box.



Spatial: Distance Judgement



Questions: Which option corresponds to the shortest grasping distance?

Answer: Grab the item in the blue bounding box using the right gripper.

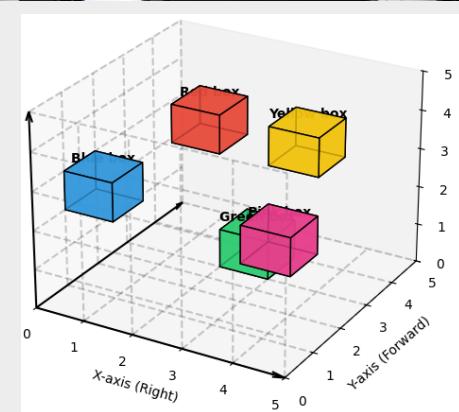


Spatial: 3D Spatial Consistency



Question: If a spatial cube coordinate system is established in the head view, which of the following sets of representations better matches the relative positions of the objects marked in the figure?

Answer: (Red box, 2, 4, 4), (Yellow box, 4, 4, 4), (Green box, 3, 4, 1), (Blue box, 1, 2, 3), (Pink box, 4, 3, 2)



Spatial: Viewpoint Identification



Question: Given the image captured by the head camera, which shows the left gripper camera's view at this moment?

Answer →



Robotic: Action Planning



Question: If I want to pour water from the kettle on the table into the water cup. <Head coordinate system>

Answer: Move the left gripper **leftward**, then **forward**, then **downward** to grasp the handle of the kettle. Then lift the kettle, move it **upward**, and then **rightward** to pour water into the cup.



Robotic: Step Execution



Question: Suppose I want to use the right gripper to grab the spoon in the bowl. <Description of coordinate system definition>

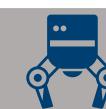
Answer: Move the right gripper **down** and then to the **left**, then **forward** to grab.



Robotic: Trajectory Selection



Question: If I want to place the pink wet wipes into the plastic bag, which color trajectory is most likely to accomplish this task? **Answer:** The pink line.



Robotic: Affordance Recognition



Question: Which colour-coded line represents the grasp candidate most likely to succeed?

Answer: Yellow line.