Draw a Figure on Stationary Cardio Equipment: Pose Construction Guide

Original tasks 1, 2 / complete keys

Task 1

Side-view stationary bike: seat contact at hip, left foot on forward pedal, right foot on rear pedal, both hands on handlebar. Describe the contact points and the leg angles.

Answer: Contacts: seat at hip, left foot forward pedal, right foot rear pedal, two hand contacts on handlebar. Left leg: hip to knee more bent, foot forward. Right leg: hip to knee less bent, foot rear. Torso leans slightly forward to handlebar.

Reason: The seat carries the hip, so the hip joint sits at the seat contact. Pedal positions determine knee bend: forward pedal shortens the hip-to-foot distance, so the knee bends more.

Check: Measure the hip-to-foot distance for each leg on your drawing. The forward pedal leg should have a shorter distance and a more bent knee than the rear pedal leg.

Task 2

Side-view elliptical: left foot on the forward pedal, right foot on the rear pedal, hands on moving handles. The torso is upright. Where should the balance line fall, and how do you check it?

Answer: The balance line should fall between the two pedal contacts, closer to the foot bearing more weight. Check by dropping a vertical line from the head; it should pass between the pedals and not outside the machine outline.

Reason: On an elliptical, weight shifts between pedals. An upright torso keeps the center of gravity near the midpoint of the two contacts.

Check: Draw the vertical line from the head oval. If it falls outside the pedal span, adjust the hip position or torso lean until it falls between the contacts.

Draw a Figure on Stationary Cardio Equipment: Pose Construction Guide

Original tasks 3, 4 / complete keys

Task 3

A treadmill pose shows a runner with both feet off the deck and both hands off the handlebar. Using the boundary of this guide, explain why this pose is excluded and how to revise it to a stationary cardio pose.

Answer: Both feet off the deck and both hands off the handlebar describe free-motion running, which is outside the stationary cardio boundary. Revise by placing one foot on the deck and one hand on the handlebar, keeping the other foot lifted behind.

Reason: The guide covers poses built from stationary machine contacts. A pose with no contact points cannot be anchored to the machine frame.

Check: Count the contact crosses on the machine outline. A valid stationary pose has at least two contacts, including one foot or seat contact.

Task 4

Using the x-height convention, a figure has torso height 3 units from hip baseline to shoulder midline, thigh length 3 units, lower leg length 3 units, and head height 1 unit. Estimate total figure height and state one proportion check.

Answer: Total height is approximately 3 (torso) + 3 (thigh) + 3 (lower leg) + 1 (head) = 10 units, ignoring neck and foot thickness. One check: thigh equals torso height, which is acceptable in this convention. However, a 1-unit head in a 10-unit figure fits about ten times into total height, which is smaller than the guide's seven-to-eight-head convention. Either enlarge the head to about 1.25–1.4 units, or state explicitly that this is a deliberate stylistic deviation from the convention.

Reason: The x-height convention measures torso from hip baseline to shoulder midline. Adding segment lengths gives a simple estimate; the check compares like segments.

Check: Re-measure each segment on the drawing with the same unit. Confirm torso, thigh, and lower leg values match your stated numbers within one small division.

Draw a Figure on Stationary Cardio Equipment: Pose Construction Guide

Source rubric / reflection

- [ ] Machine outline includes at least three contact points marked before the figure is drawn.
- [ ] Hip joint is placed relative to the seat or support foot, not floating.
- [ ] Spine curve connects hip to shoulder line and head sits above shoulders.
- [ ] Each limb is drawn as a two-segment chain with a clear joint.
- [ ] Torso height is measured as x-height from hip baseline to shoulder midline.
- [ ] Balance line from head passes through or near the main support point.
- [ ] One motion cue is present and does not conflict with the machine direction arrow.
- [ ] Letter-style shapes are used consistently, or an alternative consistent convention is explained.

Reflection: What did you check, what did you change, and what will you try next?