Running Pose Reference: Stride Phases and Torso Lean

Original tasks 1, 2, 3 / complete keys

Task 1

Sketch a push-off phase where the left leg is the support leg extended behind the hip. The right knee rises forward. The torso lean is hypothetically 12 degrees. Label the lean angle.

Answer: A drawing with left leg extended back from hip, right knee forward and high, torso midline leaning 12 degrees from vertical, and angle label.

Reason: Push-off requires the support leg behind the body and increased lean. The rising swing knee shows propulsion.

Check: Verify the support foot is behind the hip circle and the lean angle is larger than your contact angle.

Task 2

Draw a flight phase with the right leg forward and left leg back. Both feet are off the ground. The torso lean is hypothetically 10 degrees. Add arms in opposition.

Answer: A drawing with right leg forward, left leg back, no ground contact, torso midline leaning 10 degrees, left arm forward and right arm back.

Reason: Flight has no ground contact and a scissor leg shape. Arms oppose legs.

Check: Confirm both feet are above the baseline and the forward leg is opposite the forward arm.

Task 3

Compare contact and push-off panels: in contact, the support foot is under the hip; in push-off, it is behind. Draw both panels and label the torso lean angles. Use hypothetical angles of 6 and 14 degrees.

Answer: Two panels: contact with foot under hip and 6-degree lean; push-off with foot behind hip and 14-degree lean.

Reason: The comparison shows how support foot position and lean change across phases.

Check: Measure that the push-off lean is greater than the contact lean and that foot positions match the definitions.

Running Pose Reference: Stride Phases and Torso Lean

Original tasks 4 / complete keys

Task 4

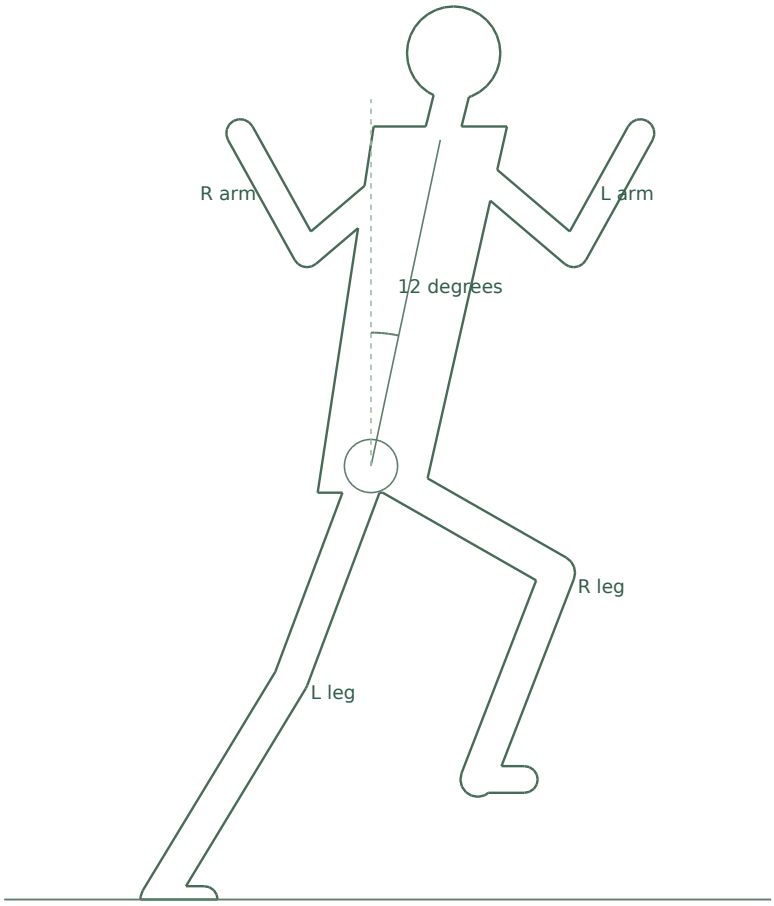
Draw a contact phase where the left leg is support and the right leg swings backward. The torso lean is hypothetically 7 degrees. Label the lean and check that the support foot is under the hip.

Answer: A drawing with left support foot under hip, right leg swinging back, torso midline leaning 7 degrees, and angle label.

Reason: Contact can have the swing leg backward as a valid alternative, as long as support foot is under the hip and lean is small.

Check: Verify the support foot is under the hip circle and the lean angle is the smallest among your three phases.

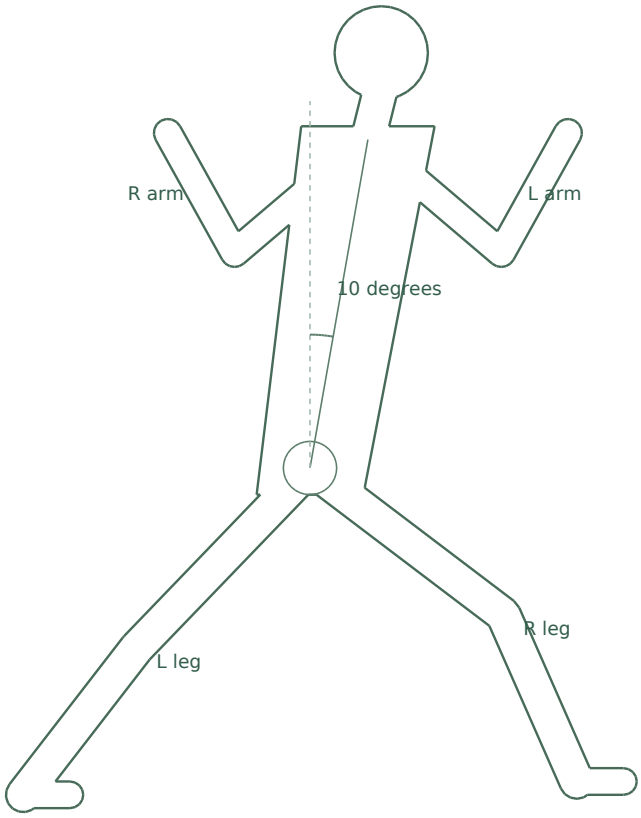
Phase construction / source angles measured from the vertical



push-off / 12 degrees

Chosen schematic figure. Forward is to the page right. R/L denote body sides. Ground contact, limb opposition and torso angle are separate checks; proportions are not a sports or anatomy standard.

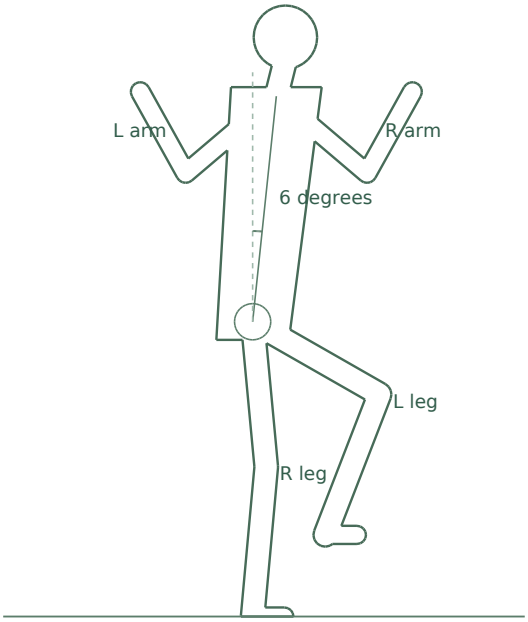
Phase construction / source angles measured from the vertical



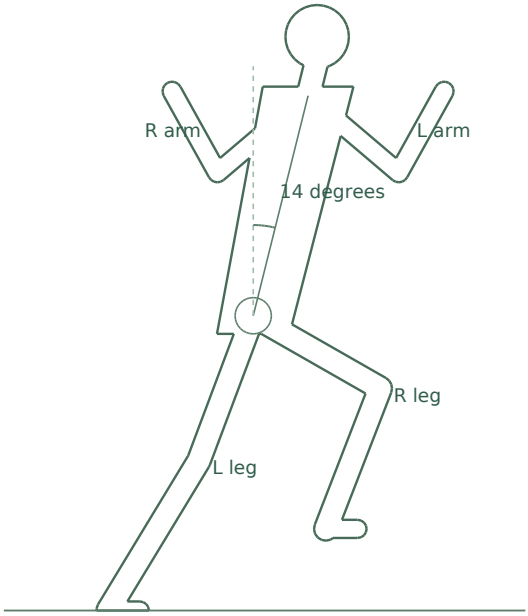
flight / 10 degrees

Chosen schematic figure. Forward is to the page right. R/L denote body sides. Ground contact, limb opposition and torso angle are separate checks; proportions are not a sports or anatomy standard.

Phase construction / source angles measured from the vertical



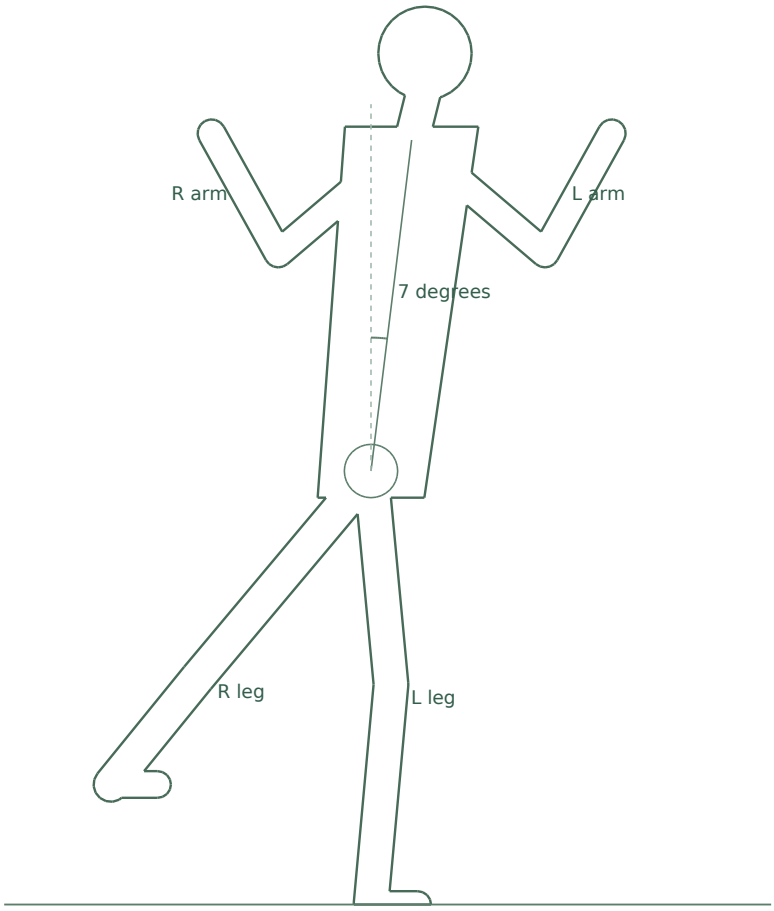
contact / 6 degrees



push-off / 14 degrees

Chosen schematic figure. Forward is to the page right. R/L denote body sides. Ground contact, limb opposition and torso angle are separate checks; proportions are not a sports or anatomy standard.

Phase construction / source angles measured from the vertical



contact / 7 degrees

Chosen schematic figure. Forward is to the page right. R/L denote body sides. Ground contact, limb opposition and torso angle are separate checks; proportions are not a sports or anatomy standard.

Running Pose Reference: Stride Phases and Torso Lean

Source rubric / reflection

- [ ] Three phases are clearly labeled and distinguishable.
- [ ] Torso lean is annotated with measured or estimated angles.
- [ ] Contact phase shows support foot under hip and smallest lean.
- [ ] Push-off phase shows extended support leg and largest lean.
- [ ] Flight phase shows both feet off ground and scissor legs.
- [ ] Arms oppose legs in each phase.
- [ ] Valid alternatives are accepted if phase logic is consistent.

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