Color Contour Hand Drawing: Trace Edges, Fill Flat Color

Original tasks 1, 2 / complete keys

Task 1

Draw a border 10 cm by 14 cm. Sketch a palm rounded rectangle 4 cm wide and 6 cm tall, three finger rectangles each 1.5 cm wide and 4 cm long, and one thumb 1.5 cm wide and 3 cm long. Trace all contours with one continuous line per edge. Use a color key with letters A and B. Fill the palm with A, the thumb with B, and alternate the three fingers A, B, A. Count the regions and state how many regions use each color.

Answer: There are five regions: one palm, three fingers, one thumb. Color A is used by the palm and two fingers, so three regions use A. Color B is used by the thumb and one finger, so two regions use B.

Reason: The convention gives one palm, three fingers, and one thumb, totaling five regions. The fill plan assigns A to the palm and two fingers, and B to the thumb and one finger. Counting confirms three A regions and two B regions.

Check: Count the regions on the drawing and compare to five. Count the regions filled with A and with B, and verify the totals are three and two. Check that each internal edge is traced and no color crosses it.

Task 2

A student sketches a palm 5 cm wide and 7 cm tall, four fingers each 1.5 cm wide and 5 cm long, and a thumb 1.5 cm wide and 3 cm long inside a 12 cm by 18 cm border. They trace the outer contour but leave a 1 cm gap between the first finger and the palm. They fill the palm with color A and the first finger with color B, and the color crosses the gap. Describe the mistake and the fix, then state how many regions should be closed after the fix.

Answer: The mistake is an open contour gap that lets color cross between the palm and the first finger. The fix is to draw a short line segment closing the gap and re-trace the internal edge, then trim the color so each region is separate. After the fix, six regions should be closed: palm, four fingers, thumb.

Reason: An open gap means the region is not bounded, so flat fill cannot stay inside one region. Closing the gap with a short segment and re-tracing the internal edge restores the boundary. The convention has six regions total, so all six should be closed after the fix.

Check: Locate the gap and confirm it is closed by a line segment. Check that the palm and first finger have separate flat colors with no crossing. Count the closed regions and verify the total is six.

Color Contour Hand Drawing: Trace Edges, Fill Flat Color

Original tasks 3, 4 / complete keys

Task 3

Draw a border 15 cm by 20 cm. Use the convention: palm 6 cm by 8 cm, four fingers 2 cm wide and 5 to 7 cm long, thumb 2 cm wide and 4 cm long. Trace all contours. Use a color key with letters A, B, C, D. Fill the palm with A, the thumb with D, and assign B and C to the four fingers so that no two adjacent fingers share the same color. State the color assignment and count how many regions use each color.

Answer: One valid assignment is: finger 1 B, finger 2 C, finger 3 B, finger 4 C. The palm uses A, the thumb uses D. Color A is used by one region, B by two fingers, C by two fingers, and D by one region.

Reason: Adjacent fingers must not share a color, so alternating B and C across four fingers satisfies the rule. The palm and thumb use separate letters A and D. Counting gives one A region, two B regions, two C regions, and one D region.

Check: Check each pair of adjacent fingers and confirm they have different letters. Count the regions per color and verify the totals are one, two, two, and one. Confirm every region is closed and filled with flat color.

Task 4

A student draws a hand contour with five regions and uses three colors: A, B, C. They claim every internal edge is clear because each edge has a different color on each side. There are four internal edges in their drawing. Is the claim possible? Explain using a simple count, and state one check they can perform.

Answer: The claim is possible only if the color arrangement allows each of the four internal edges to separate two different colors. With three colors and five regions, some colors must repeat, so the student must verify each edge individually. A simple check is to point to each internal edge and name the two colors on either side; if any edge has the same color on both sides, the claim fails for that edge.

Reason: Five regions and three colors means at least two regions share a color, so a repeated color does not automatically break the claim, but each internal edge must still be checked. Four internal edges require four pairwise color differences. The count alone does not prove the claim; the edge-by-edge check does.

Check: List the four internal edges and write the two colors on each side. Confirm that no edge has the same letter on both sides. If all four edges pass, the claim holds for this drawing.

Color Contour Hand Drawing: Trace Edges, Fill Flat Color

Source rubric / reflection

- [ ] Contour lines are continuous and deliberate, with no fuzzy back-and-forth sketching on the final edges.
- [ ] Every region is closed by a contour line or the border rectangle, with no open gaps.
- [ ] Each region is filled with one flat color, and no color crosses an internal edge.
- [ ] The color key lists every letter used and matches the filled regions.
- [ ] Internal edges are traceable: each edge separates two named regions, even if they share a color.
- [ ] The drawing follows the stated convention or a clearly labeled alternative convention, and valid stylistic variations are accepted.

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