CERTLABZ CERTIFICATION BOARD

Certified Data Visualization Professional (CDVP)

Ten Sample Questions

These ten questions are written at the difficulty of the live exam. Six carry a figure, a data table, a configuration or a code listing; four are plain scenario questions, as on the live paper. Every one is a scenario a working data visualization professional would meet, and none of them appears in the live question bank.

The live exam is multistage adaptive: how you score on one stage selects the difficulty of the next, so no two candidates sit the same paper. It is a performance-based exam: each form can carry up to 5 to 12 performance-based questions alongside the multiple-choice questions, which means you build, sequence or complete something rather than only choosing from a list. Answers and full explanations follow each question here; the live exam does not disclose item-level answers.

Question 1

Domain 1: Visualization Foundations and Perception

DATA

Emma Wilson matches each visual encoding to the perceptual task it supports best.

Encoding	Best for
Position on a common scale	(to choose)
Length	(to choose)
Angle or area	(to choose)
Color hue	(to choose)

Table 1.1 Encodings and their tasks.

Which set of tasks is correct?

A. Categorical grouping, rough magnitude, good comparison and precise comparison, so color hue carries the most accurate quantitative reading of the four.

B. Precise value comparison, good value comparison, rough magnitude only, and categorical grouping, matching each encoding to what the eye judges best.

C. Rough magnitude, categorical grouping, precise comparison and good comparison, so angle or area gives the most accurate quantitative reading here.

D. Good comparison, precise comparison, categorical grouping and rough magnitude, so length beats position for the most accurate quantitative reading.

Correct answer: B
Position on a common scale is judged most accurately, length next, angle or area only roughly, and color hue distinguishes categories rather than magnitude. Only option B pairs each encoding with the perceptual task it best supports.

Question 2 — Domain 2: Choosing the Right Chart — CONFIG

James Carter reviews a design that shows twelve months of revenue as a pie chart.

```
chart type : pie
slices     : 12 months
goal       : show revenue trend
reading    : compare month to month
```

Listing 2.1 The current chart choice.

What is the soundest change?

A. Keep the pie chart but add more slices and brighter colors, since a pie always shows change over time better than any other chart type available.

B. Switch to a donut chart with the same twelve slices, because removing the center makes month-to-month revenue trends far easier to read accurately.

C. Use a line chart with months on the x axis, since a line shows change over time and lets the eye compare each month along a common scale.

D. Explode every slice and sort them by size, on the belief that separating the wedges is what lets a reader follow revenue across the twelve months.

Correct answer: C
A pie chart encodes parts of a whole at one moment and hides trends, so twelve time slices are hard to compare. A line chart places months on a common scale and shows the rise and fall directly. Donut and exploded pies share the same weakness.

Question 3 — Domain 3: Data Preparation for Visualization — DATA

Olivia Davis maps each data problem to the shaping step that resolves it.

Problem	Step
Wide, one column per month	(to choose)
Same category spelled several ways	(to choose)
Numbers stored as text	(to choose)
Totals mixed with detail rows	(to choose)

Table 3.1 Data problems and shaping steps.

Which set of steps is correct?

A. Cast to numeric, filter aggregate rows, reshape to long and standardize labels, so casting fixes the one-column-per-month wide layout problem.

B. Standardize labels, reshape to long, cast to numeric and filter aggregate rows, so standardizing labels fixes numbers that are stored as text.

C. Filter aggregate rows, cast to numeric, standardize labels and reshape to long, so filtering rows fixes categories that are spelled several ways.

D. Reshape to long, standardize labels, cast to numeric and filter aggregate rows, matching each data problem to the shaping step that resolves it.

Correct answer: D
Wide month columns need reshaping to a long tidy form, inconsistent spellings need label standardizing, text numbers need casting to a numeric type, and mixed totals need aggregate rows filtered out. Only option D pairs each problem with the correct step.

Question 4

Domain 4: Dashboard Design and Interactivity

CONFIG

Liam Anderson lists the stages of building a dashboard, shown out of order.

```
A. Publish and set a refresh schedule
B. Define the audience and key questions
C. Choose a chart for each question
D. Arrange layout, most important top left
E. Add filters and drill interactions
```

Listing 4.1 Stages to order.

What is the correct order of these stages?

A. B, then C, then D, then E, then A, defining the questions, choosing charts, arranging layout, adding interactions, then publishing with refresh.

B. C, then B, then A, then D, then E, choosing charts before the questions are known and publishing before the layout or interactions exist yet.

C. D, then E, then B, then C, then A, arranging a layout and adding filters before the audience or the chart for each question is decided.

D. B, then A, then C, then D, then E, publishing the dashboard second, before any charts, layout or interactions have actually been built at all.

Correct answer: A
Good dashboards start from the audience and questions (B), choose a chart per question (C), arrange layout with the most important view top left (D), add filters and drilling (E), then publish with a refresh schedule (A). The other orders build or publish before the questions or charts exist.

Question 5

Domain 5: Storytelling and Communication

DATA

Ava Thompson matches each misleading practice to its honest fix.

Practice	Honest fix
Y axis truncated to exaggerate	(to choose)
Dual axes tuned to imply a link	(to choose)
Cherry-picked date range	(to choose)
3D effect distorts sizes	(to choose)

Table 5.1 Practices and honest fixes.

Which set of fixes is correct?

A. Annotate dual axes, use flat 2D, start bars at zero and show the full range, so annotating the axes is the fix for a truncated y axis on a bar.

B. Show the full range, start bars at zero, use flat 2D and annotate dual axes, so showing the full range is the fix for a truncated y axis on a bar.

C. Start bars at zero, drop or annotate dual axes, show the full range and use flat 2D, matching each misleading practice to its honest fix.

D. Use flat 2D, show the full range, annotate dual axes and start bars at zero, so a flat 2D chart is the fix for a truncated y axis on a bar.

Correct answer: C

A truncated axis is fixed by starting bars at zero, a suggestive dual axis by dropping or clearly annotating it, a cherry-picked window by showing the full relevant range, and a 3D effect by using a flat 2D chart. Only option C pairs each practice with the matching fix.

Question 6

Domain 6: Delivery, Performance and Governance

DATA

A published dashboard is assessed as shown below.

Observation	Result
Certified as the source of truth	No
Loads within a few seconds	No
Access limited by role	No
Metric definitions documented	No

Table 6.1 How the dashboard is delivered today.

What is the core weakness, and what should be fixed?

A. Nothing is wrong, because a dashboard that renders at all is by definition governed, performant and safe for every viewer to rely on in decisions.

B. The charts are the problem, so restyling every visual with new colors would make the dashboard fast, governed and trustworthy without other changes.

C. The data set is too small, so loading more rows would on its own make the dashboard certified, fast and properly restricted by each viewer role.

D Governance and performance are missing; certify the source, tune queries for speed, restrict access by role, and document every metric definition.

Correct answer: D
An uncertified, slow, unrestricted dashboard with undocumented metrics fails on governance and performance, so viewers cannot trust or safely use it. The fix is to certify the source, tune for speed, restrict access by role, and document each definition. Restyling or adding rows addresses none of these.

Question 7 Domain 2: Choosing the Right Chart

A team wants to compare sales across fifteen product categories at one point in time. Which chart best supports accurate comparison?

A A horizontal bar chart sorted by value, since bars on a common axis let the eye compare fifteen categories accurately and long labels stay readable.

B A pie chart with fifteen slices, because dividing a circle into many wedges is the clearest way to compare categories that differ only slightly.

C A single stacked bar split into fifteen segments, since stacking removes the shared baseline yet still makes each category easy to compare exactly.

D A bubble chart sizing each category by value, because judging the area of fifteen circles is more accurate than reading their length on an axis.

Correct answer: A
With many categories at one time, a sorted horizontal bar chart puts every value on a common axis for accurate length comparison and keeps long labels legible. Pie wedges, stacked segments without a shared baseline, and bubble areas are all harder to compare precisely.

Question 8 Domain 4: Dashboard Design and Interactivity

A dashboard shows thirty charts of equal size with no clear starting point, and viewers cannot find the key numbers. What is the soundest fix?

A Add more charts so every possible question is answered on one screen, since a viewer always prefers seeing all thirty views at once over navigating.

B Lead with a few key numbers, group related charts, and use size and position to set a clear hierarchy so the eye starts at what matters most.

C Make every chart larger and brighter, because increasing the size and color of all thirty views equally is what draws the eye to the important ones.

D Animate each chart on load, on the belief that motion across all thirty views is what tells a viewer which numbers on the screen matter most.

Correct answer: B
A flat wall of equal charts gives the eye no entry point. Leading with a few key numbers, grouping related views, and using size and position to build a hierarchy guides attention to what matters first. Adding, enlarging, or animating everything equally only worsens the overload.

Question 9

Domain 5: Storytelling and Communication

An analyst presents a chart to executives with no title, no takeaway, and every data point shown at once. What best improves the communication?

A. Add even more data points and gridlines, since a denser chart always signals rigor and lets executives draw the conclusion entirely on their own.

B. Remove the chart and read the raw table aloud, because a table of every number communicates a finding faster than any annotated visual could.

C. Write the takeaway as the title, highlight the relevant series, and strip clutter so the one point the chart makes is clear at a glance.

D. Switch to a 3D chart with bold colors, on the belief that a more decorative visual is what makes a business finding memorable to an executive.

Correct answer: C

Executive charts should state their conclusion in the title, emphasize the series that supports it, and remove clutter so the message reads at a glance. Adding data, reverting to a raw table, or adding 3D decoration hides the point rather than clarifying it.

Question 10

Domain 6: Delivery, Performance and Governance

Two dashboards report different revenue for the same month because each defines revenue differently, and viewers no longer trust either. What practice best fixes this?

A. Let each team keep its own definition and hide the difference, since viewers will trust a single number more if they never see the two disagree.

B. Pick whichever dashboard shows the higher revenue as correct, because the larger figure is the safer one to present to the business every time.

C. Rebuild both dashboards with new colors and layout, on the belief that a fresher look alone restores trust in numbers that still disagree.

D. Define revenue once in a shared, documented metric layer and have both dashboards draw from it, so the same term returns the same number everywhere.

Correct answer: D

Conflicting numbers come from inconsistent metric definitions, which governance addresses with a single documented definition in a shared metric layer that every dashboard uses. Hiding the gap, favoring the larger figure, or restyling leaves the underlying inconsistency in place.

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