

|    |   |   |   |   |   |
|----|---|---|---|---|---|
| 01 | A | B | C | D | E |
| 02 | A | B | C | D | E |
| 03 | A | B | C | D | E |
| 04 | A | B | C | D | E |
| 05 | A | B | C | D | E |
| 06 | A | B | C | D | E |
| 07 | A | B | C | D | E |
| 08 | A | B | C | D | E |
| 09 | A | B | C | D | E |
| 10 | A | B | C | D | E |
| 11 | A | B | C | D | E |
| 12 | A | B | C | D | E |
| 13 | A | B | C | D | E |

|    |   |   |   |   |   |
|----|---|---|---|---|---|
| 14 | A | B | C | D | E |
| 15 | A | B | C | D | E |
| 16 | A | B | C | D | E |
| 17 | A | B | C | D | E |
| 18 | A | B | C | D | E |
| 19 | A | B | C | D | E |
| 20 | A | B | C | D | E |
| 21 | A | B | C | D | E |
| 22 | A | B | C | D | E |
| 23 | A | B | C | D | E |
| 24 | A | B | C | D | E |
| 25 | A | B | C | D | E |
| 26 | A | B | C | D | E |

|    |   |   |   |   |   |
|----|---|---|---|---|---|
| 27 | A | B | C | D | E |
| 28 | A | B | C | D | E |
| 29 | A | B | C | D | E |
| 30 | A | B | C | D | E |
| 31 | A | B | C | D | E |
| 32 | A | B | C | D | E |
| 33 | A | B | C | D | E |
| 34 | A | B | C | D | E |
| 35 | A | B | C | D | E |
| 36 | A | B | C | D | E |
| 37 | A | B | C | D | E |
| 38 | A | B | C | D | E |
| 39 | A | B | C | D | E |

## PRACTICE QUESTIONS

JHU CTY

# STB

SPATIAL TEST BATTERY - STB

EDITION

Demo

QUESTIONS

9

FORMAT

Limited Edition PDF

# Before you begin

---

## What this is

9 practice questions for JHU CTY **STB**, each with its answer key and an explanation. Answer a question before you read its key — the explanation is worth more once you have committed.

## If something looks wrong

Send us three things and we will check it:

- the exam code, **STB**
- the question number
- the email address on your order

Write to **support@mometrix.net**. We reply within one business day.

**QUESTION 1** SINGLE CHOICE

Two-dimensional mental rotation tasks on the STB require the examinee to:

- ☐ A Memorize a sequence of locations in a grid and reproduce it from memory.
- ☒ B Determine whether a rotated figure matches a target figure when presented at different angular orientations.
- ☐ C Estimate the distance between two points on a map using a numeric scale.
- ☐ D Fold a flat net into a three-dimensional shape and identify the matching solid.

**ANSWER B**

**WHY** 2D mental rotation, as used on the Spatial Test Battery (e.g., the Mental Rotations Test), presents a target figure at different rotations and asks whether a comparison figure matches it, requiring the examinee to mentally rotate the stimulus.

**QUESTION 2** SINGLE CHOICE

In the Spatial Orientation Test component of the STB, perspective-taking items primarily measure the ability to:

- ☐ A Rotate a flat figure to match another figure.
- ☒ B Imagine how an arrangement of objects or a scene appears from a viewpoint different from one's own.
- ☐ C Count the number of cubes embedded in a composite hidden-figure display.
- ☐ D Discriminate the length of two lines drawn across a tilted reference frame.

**ANSWER B**

**WHY** The Spatial Orientation Test asks examinees to imagine a scene (for example, rotating an arrow on a mat) and judge directions from a different observer's viewpoint, which is the defining feature of perspective taking.

**QUESTION 3** SINGLE CHOICE

Embedded Figures items on the STB require the examinee to:

- ☒ **A** Identify a simple target shape hidden within a more complex figure.
- ☐ **B** Determine which of several solids can be assembled from a given set of flat nets.
- ☐ **C** Compare the orientation of a stimulus rotated in the picture plane.
- ☐ **D** Reproduce a pattern of colored squares from memory after a brief exposure.

**ANSWER A**

**WHY** The Embedded Figures Test format presents a target figure that must be located within a more complex, distracting figure, measuring field-dependence vs. field-independence aspects of spatial visualization.

**QUESTION 4** SINGLE CHOICE

Paper-folding items on the STB ask examinees to mentally track the location of holes punched through a square of paper after a series of folds. The skill being measured is best described as:

- ☐ **A** Mental rotation in the picture plane.
- ☐ **B** Perspective taking from a rotated viewpoint.
- ☒ **C** Mental folding and unfolding of a two-dimensional surface into and out of a three-dimensional configuration.
- ☐ **D** Estimation of angles between lines embedded in a complex figure.

**ANSWER C**

**WHY** Paper-folding items test visualization by requiring examinees to mentally fold a flat paper through several steps, then determine where punched holes would end up on the unfolded sheet — a classic visualization-of-folding task.

**QUESTION 5** SINGLE CHOICE

Surface-development (net) items on the STB test the ability to:

- ☐ A Match rotated 2D figures to a target regardless of orientation.
- ☒ B Determine which flat arrangement of faces will fold up into a given three-dimensional solid.
- ☐ C Locate a simple figure hidden within a complex figure.
- ☐ D Judge which direction a person facing a different way is pointing.

**ANSWER B**

**WHY** Surface-development items present a 3D solid and ask which 2D net of faces will fold into it, measuring the ability to relate a 3D object to its unfolded 2D representation.

**QUESTION 6** SINGLE CHOICE

STB items are administered as timed, multiple-choice items with one correct response per item. The purpose of the timing component is to:

- ☐ A Allow examinees unlimited time so that accuracy alone is recorded.
- ☒ B Require responses within a per-item or subtest time limit so that performance reflects speeded spatial reasoning rather than purely deliberate analysis.
- ☐ C Measure reading speed instead of spatial ability.
- ☐ D Provide extra time for examinees who request accommodations.

**ANSWER B**

**WHY** The STB is a power-and-speed battery; each subtest is timed so that correct responses reflect efficient spatial processing, not only careful deliberation under unlimited time.

**QUESTION 7** SINGLE CHOICE

On the Spatial Test Battery, the score typically reported for each subtest is:

- ☐ A The total time taken, in seconds, to complete the subtest.
- ☐ B The number of items attempted, regardless of correctness.
- ☒ C The number of items answered correctly within the time limit.
- ☐ D A qualitative rating assigned by the examiner based on observed strategy use.

**ANSWER C**

**WHY** Each STB subtest yields a count of correct responses completed within the time limit; this raw correct score is then used for normative comparisons or composite indices.

**QUESTION 8** SINGLE CHOICE

The STB separates Spatial Orientation from Spatial Visualization because the two abilities differ in that:

- ☐ A Orientation tasks involve no mental transformation, whereas visualization tasks do.
- ☒ B Orientation tasks require imagining an object or scene from a different viewpoint or orientation, while visualization tasks require mentally manipulating an object's configuration (such as folding, rotating, or unfolding it).
- ☐ C Visualization tasks are timed, but orientation tasks are not.
- ☐ D Orientation items use verbal stimuli, whereas visualization items use only pictorial stimuli.

**ANSWER B**

**WHY** Following the tradition established by researchers such as Thurstone, the STB distinguishes orientation (changing viewpoint, e.g., perspective taking) from visualization (mentally reconfiguring an object, e.g., folding or rotating it).

**QUESTION 9**

MULTIPLE CHOICE

Which of the following are subtests included in JHU CTY's Spatial Test Battery (STB)? (Choose three.)

- ☒ **A** Mental Rotations Test (2D figure rotation).
- ☒ **B** Embedded Figures Test.
- ☐ **C** Verbal Analogies subtest.
- ☒ **D** Spatial Orientation Test (perspective taking).
- ☐ **E** Numerical Estimation subtest.

---

**ANSWER** A · B · D

**WHY** The STB includes measures of mental rotation (e.g., Mental Rotations Test), embedded figures, and spatial orientation/perspective taking. Verbal analogies and pure numerical estimation are not part of the STB's spatial focus.