

1. A GUI is a Graphical User Interface — it lets users interact with a program using windows, buttons, icons, and text fields instead of typing commands.
 2. The program waits for user actions like button clicks. When an event happens, the matching event-handling code runs.
 3. Yes, but it's better to add them to the frame's content pane. Adding directly can cause layout issues in some Java versions.
 4. No, a JLabel just shows text or images and doesn't react to user input.
 5. It keeps the interface responsive and prevents freezing by handling all GUI updates and events on one special thread.
 6. A label only shows info. A button shows info and also can be clicked to trigger actions.
8. Use a layout manager, set layout to null and position manually, or nest panels with different layouts.
13. Convert it from a string to a number using something like Integer.parseInt() or Double.parseDouble().
 14. num1 = 3 + 5 → 8.0 (double).
15. Combo boxes are easier for the user to pick from a set list and avoid typing mistakes.