Here's how to set up password policies on MySQL securely on Ubuntu in accordance with the CIS benchmarks:

1. Leverage validate_password Plugin:

- MySQL versions 5.7.6 and later include the validate_password plugin, which enforces password complexity rules. This plugin is likely recommended by the CIS benchmarks for stronger password security.

2. Enforce Strong Password Complexity:

- The validate_password plugin offers several options to configure password complexity requirements.
- CIS benchmarks likely recommend enforcing a minimum password length (e.g., 12 characters) and requiring a combination of uppercase and lowercase letters, numbers, and special characters.

3. Configuration Options:

- Edit the MySQL configuration file (/etc/mysql/my.cnf) and locate the validate_password section. You'll find options like:
  - validate_password_length (minimum password length)
  - validate_password_mixed_case (require mixed case)
  - validate_password_policy (overall policy level - LOW, MEDIUM, STRONG)

4. Setting the Policy Level:

- The validate_password_policy option allows setting the overall complexity requirement:
  - **LOW:** Primarily enforces minimum length (default)
  - **MEDIUM:** Requires mixed case and minimum length
  - **STRONG:** Enforces mixed case, numbers, special characters, and minimum length

5. Example Configuration:

```
[mysqld]
validate_password = 1  # Enable the plugin
validate_password_length = 12  # Minimum length of 12 characters
validate_password_mixed_case_count = 2  # Require at least 2
characters of mixed case
validate_password_number_count = 1  # Require at least 1 number
```

6. Enforcing for Root User:

- Consider enabling the validate_password_check_user_name option to enforce the policy even for the root user.

Additional Resources:

- CIS MySQL Security Benchmarks (reference security guides that mention these benchmarks): While not directly available online, security guides referencing CIS benchmarks can offer details. Search for "CIS MySQL Security Benchmarks Ubuntu"
- MySQL Documentation on validate_password plugin: https://dev.mysql.com/doc/refman/8.0/en/validate-password-options-variables.html

Remember:

- Consult the specific CIS benchmarks for your Ubuntu version for exact recommendations on password complexity settings.
- Regularly review and update password policies to maintain strong security practices.
- Educate users on creating and maintaining strong passwords following your organization's guidelines.