Drawing rules in electrical engineering

a) Tick the right answers. There may be more than one correct answer.

1) In technical drawings standardized .... are used.

- ☑ numbers
- ☑ fonts
- ☑ lines
- ☐ letters
- ☑ formats
- ☐ texts

2) The main reading direction of technical drawings is

- ☐ bottom up and from the right to the left
- ☐ top down and from the right to the left
- ☐ bottom up
- ☑ top down and from the left to the right
- ☐ bottom up and from the left to the right
- ☐ top down

3) Each block in a technical drawing can be defined by

- ☐ a symbol for the material
- ☐ diagonal and vertical lines
- ☑ a letter for the line
- ☑ an alphanumeric combination
- ☑ a digit for the column
- ☐ two letters

4) Mirrored drawing is allowed if it does not change the

- ☐ size of the drawing
- ☐ perspective of the drawing
- ☐ functionality of the drawing
- ☑ meaning of the drawing
- ☐ readability of the drawing
- ☐ properties of the drawn object

5) Continuous lines *[Volllinien]* are used to highlight

- ☐ unknown units
- ☐ codes of electrical equipment
- ☐ switches
- ☐ otherwise unreadable numbers
- ☑ special electric circuits
- ☐ spatial relations

6) The position of a wiring symbol is primarily

- ☐ horizontal
- ☐ vertical
- ☑ either vertical or horizontal
- ☐ diagonal
- ☐ either horizontal or diagonal
- ☐ up to the draughtsman

b) Match the correct items.

1. All connection lines must be	a. presenting one symbol.
2. Cases and housings have to be shown as	b. recognizable.
3. Relays, switches, contactors, couplings and brakes are shown as	c. framed with a dot-and-dashed line.
4. Broken connection lines must be	d. circles or rectangles with a continuous line.
5. The size of symbols and units is	e. their initial state.
6. Semiconductor switches are shown in	f. shown in the drawing.
7. Functional units and groups and physical units must be	g. “not operated”, otherwise they have to be marked as “operated”.
8. There are several ways of	h. not standardized.