Варианты заданий:

1.
$$f = \overline{a \cdot b \vee \overline{a} \cdot b \vee \overline{a} \cdot \overline{b} \vee a \cdot b \cdot c \cdot (a \vee b)} = a \cdot \overline{b} = g$$

2.
$$f = \overline{(x \lor y \lor z) \cdot (x \cdot y \lor z) \cdot y} = y \to \overline{x} \cdot \overline{z} = g$$

3.
$$f = \overline{x} \cdot (y \lor z) \cdot (x \lor \overline{y} \lor z) = x \lor \overline{z} = g$$

4.
$$f = \overline{a \cdot p \cdot c \vee c \cdot a \cdot p \vee p \cdot c \cdot (p \vee c)} = \overline{c} \vee a \cdot \overline{p} = g$$

5.
$$f = \overline{a \cdot p \vee \overline{c \cdot p} \vee a \cdot c \cdot (p \vee c)} = \overline{a} \cdot p \cdot c = g$$

6.
$$f = \overline{(y \lor z) \cdot (\overline{x} \lor y \lor z) \cdot (y \lor \overline{z}) \cdot z} = y \to \overline{z} = g$$

7.
$$f = \overline{(a \cdot p \cdot c \vee c \vee p) \cdot (p \vee a) \cdot c} = c \rightarrow a \cdot p = g$$

8.
$$f = \overline{(a \lor c) \cdot b \cdot (\overline{a} \lor b \lor \overline{c})} = b \rightarrow \overline{a \lor c} = g$$

9.
$$f = \overline{\overline{x \cdot (y \vee z) \cdot (\overline{x} \vee y \vee z)}} = \overline{x} \rightarrow \overline{y} \cdot z = g$$

$$10.f = a \cdot (\overline{b} \vee \overline{c}) \cdot (\overline{a} \vee b \vee c) = a \rightarrow (b \sim c) = g$$

11.f=
$$\overline{(a \vee \overline{b}) \cdot b \cdot (a \vee b \vee \overline{c})} = a \rightarrow \overline{b} = g$$

$$12.f = \overline{p \cdot (p \vee q) \cdot (\overline{a} \vee p \vee q)} = \overline{p} \rightarrow \overline{q} = g$$

$$13.f = \overline{(\overline{a} \vee \overline{b} \vee c) \cdot (a \vee b) \cdot c} = c \rightarrow \overline{a} \cdot \overline{b} = g$$

14.f=
$$\overline{(x \lor y) \cdot y \cdot (\overline{x} \lor \overline{y} \lor \overline{z})} = y \to x \cdot z = g$$

$$15.f = \bar{a} \cdot (\bar{a} \vee \bar{b}) \cdot (a \vee \bar{b} \vee c) = a \vee b \cdot \bar{c} = g$$

$$16.f = \overline{a \cdot c} \cdot (a \cdot b \vee \overline{c} \vee a \cdot c) \cdot (\overline{a} \vee c) = a \oplus c = g$$

17.f=
$$(x \cdot \overline{y} \lor y \cdot z \lor x \cdot \overline{y} \cdot z) \cdot (\overline{x} \lor \overline{z}) \lor z = \overline{z} \to x \cdot \overline{y} = g$$

$$18.f = \overline{(a \lor c) \cdot p \lor \overline{p} \cdot (a \lor p \lor c)} = \overline{a} \cdot \overline{c} = g$$

$$19.f = \overline{(a \cdot c \lor p) \cdot (a \lor p \lor c) \cdot p} = \overline{p} \to \overline{a \cdot c} = g$$

$$20.f = \overline{q \cdot (\overline{a} \vee \overline{p}) \cdot (a \vee p \vee q)} = q \rightarrow a \cdot p = g$$

$$21.f = \overline{(\overline{x} \vee \overline{z}) \cdot y \cdot (x \cdot y \vee y \vee \overline{z})} = \overline{y} \vee x \cdot z = g$$

22.f=
$$\overline{(\overline{a} \vee \overline{b} \vee \overline{c}) \cdot (\overline{b} \vee c) \cdot b} = \overline{a} \rightarrow \overline{b \cdot c} = g$$

$$23.f = (x \lor z) \cdot (x \lor y \lor z) \cdot (y \lor z) = \overline{z} = g$$

24.
$$f = \overline{x} \cdot (y \lor z) \cdot (\overline{x} \lor \overline{y} \lor z) \lor \overline{z} = x \cdot z = g$$

25.
$$f = \overline{y \cdot (x \vee \overline{z}) \cdot (x \vee y \vee z) \vee \overline{x}} = x \cdot \overline{y} = g$$

26.
$$f=x\cdot(\overline{y}\vee z)\cdot(x\vee y\vee\overline{z})\vee\overline{z}=\overline{x}\cdot z=g$$

27.
$$f = z \cdot (\overline{x} \vee y) \cdot (\overline{x} \vee y \vee z) \vee \overline{y} = y \cdot \overline{z} = g$$

28.
$$f = \overline{x \cdot (y \vee \overline{z}) \cdot (x \vee y \vee z)} = x \rightarrow \overline{y} \cdot z = g$$

29.
$$f = \overline{(a \cdot b \cdot c \vee c \vee a) \cdot (\overline{a} \vee \overline{c} \cdot b) \cdot b} = b \rightarrow (a \sim c) = g$$

30.
$$f = \overline{(x \vee \overline{z}) \cdot y \cdot (\overline{x} \vee y \cdot z \vee z)} = y \rightarrow (x \oplus z) = g$$

31.
$$f = \overline{(x \cdot y \vee \overline{y} \vee \overline{x} \cdot \overline{y} \cdot z) \cdot (y \vee \overline{z}) \cdot y} = x \rightarrow \overline{y} = g$$

32.
$$f = \overline{(x \cdot \overline{y} \cdot z \vee y \cdot \overline{z} \vee y) \cdot (x \vee \overline{y}) \cdot (x \vee y)} = x \rightarrow \overline{y} \cdot \overline{z} = g$$

33.
$$f=(x \lor z) \cdot (\overline{x} \lor x \cdot \overline{y} \lor x \cdot z) \cdot z = \overline{z} = g$$

34.
$$f = \overline{a \cdot (a \cdot \overline{c} \vee \overline{a} \cdot b \cdot c \vee \overline{b} \cdot \overline{c}) \cdot (a \vee c)} = a \rightarrow c = g$$

35.
$$f = \overline{(p \cdot q \vee \overline{p} \cdot \overline{q} \cdot t \vee \overline{q}) \cdot \overline{p} \cdot (q \vee t)} = p \vee q \vee \overline{t} = g$$

36.
$$f = \overline{b \cdot (a \vee b)(a \cdot b \cdot \overline{c} \vee \overline{b} \cdot \overline{c} \vee a \cdot c)} = a \rightarrow \overline{b} = g$$

37.
$$f = \overline{(x \cdot y \vee \overline{y \cdot z}) \cdot x \vee (y \cdot z \vee y \cdot \overline{z}) \cdot y} = \overline{x} \cdot \overline{y} = g$$

38.
$$f = \overline{(a \cdot c \vee \overline{a} \cdot \overline{c} \vee a \cdot b \cdot c) \cdot (a \vee c) \vee \overline{c}} = \overline{a} \cdot c = g$$

39.
$$f = \overline{(p \cdot q \cdot \overline{t} \vee \overline{q} \cdot t \vee \overline{p} \cdot \overline{q} \cdot t) \cdot t \cdot (q \vee t)} = \overline{q} \rightarrow \overline{t} = g$$

40.
$$f = \overline{(x \cdot \overline{y} \vee \overline{x} \cdot \overline{y} \cdot z \vee x) \cdot \overline{y} \cdot (\overline{x} \vee z)} = \overline{y} \rightarrow \overline{z} = g$$