

The five generator nilpotent Lie algebras with immediate descendants of dimension 8

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$$\langle a, b, c, d, e \mid \text{class 1} \rangle \tag{5.1}$$

$$\langle a, b \mid \text{class 2} \rangle \oplus \langle c \rangle \oplus \langle d \rangle \oplus \langle e \rangle, \tag{6.2}$$

$$\langle a, b, c, d, e \mid cb, da, db, dc, ea, eb, ec, ed, \text{class 2} \rangle. \tag{7.5}$$

$$\langle a, b, c, d, e \mid ca, cb, da, db, ea, eb, ec, ed, \text{class 2} \rangle. \tag{7.6}$$

$$\langle a, b, c, d, e \mid cb, da, db - ca, dc, ea, eb, ec, ed, \text{class 2} \rangle. \tag{7.7}$$

$$\langle a, b, c, d, e \mid cb, da, db - ca, dc - \omega ba, ea, eb, ec, ed, \text{class 2} \rangle. \tag{7.8}$$

$$\langle a, b, c, d, e \mid cb, da, db, dc, ea, eb, ec, ed - ba, \text{class 2} \rangle. \tag{7.9}$$

$$\langle a, b, c, d, e \mid cb, da, db - ca, dc, ea, eb, ec, ed - ba, \text{class 2} \rangle. \tag{7.10}$$

$$\langle a, b, c, d, e \mid bab, ca, cb, da, db, dc, ea, eb, ec, ed, \text{class 3} \rangle. \tag{7.11}$$

$$\langle a, b, c, d, e \mid bab, ca, cb - baa, da, db, dc, ea, eb, ec, ed, \text{class 3} \rangle. \tag{7.12}$$