Lineare Gleichungssysteme mit vier Unbekannten

1)
$$4a + 3b + 2c - 1d = 0$$
$$3a + 1b - 2c - 2d = 4$$
$$1a - 2b + 3c - 4d = -13$$
$$1a + 4b + 3c + 4d = 5$$

2)
$$2a - 3b + 2c - 4d = -20$$
$$3a - 1b + 4c + 2d = -23$$
$$1a - 3b + 4c - 3d = -13$$
$$2a + 2b - 2c + 1d = -2$$

3)
$$-1a + 3b - 4c + 2d = 2$$
$$2a + 4b + 4c - 3d = 10$$
$$-3a - 2b - 3c - 2d = -8$$
$$2a - 2b - 2c - 4d = -2$$

4)
$$3a + 1b + 1c - 3d = -1$$
$$-4a - 1b + 1c + 1d = -7$$
$$2a + 3b - 1c - 4d = 13$$
$$3a + 1b + 1c + 2d = 8$$

5)
$$-2a + 1b + 2c + 3d = -6$$
$$4a + 3b + 1c - 3d = 18$$
$$2a + 3b + 3c + 1d = 20$$
$$-2a - 3b - 2c - 1d = -18$$

6)
$$1a + 1b + 5c + 3d = 18$$
$$1a + 3b + 6c - 1d = 35$$
$$-2a + 3b - 1c + 4d = -8$$
$$-4a + 4b + 3c - 1d = 0$$

7)
$$-2a + 1b + 4c + 2d = -13$$
$$5a - 1b + 3c - 3d = 34$$
$$5a + 3b + 4c - 1d = 31$$
$$2a + 3b + 1c - 1d = 10$$

8)
$$-1a + 1b + 2c + 8d = 14$$
$$-1a - 1b + 7c + 4d = -3$$
$$-2a + 6b + 1c + 9d = 5$$
$$4a + 7b + 5c + 3d = 54$$

1) L = {(-1 / 3 / -2 / 1)}

2) L = {(-3 / -2 / -4 / 3)}

3) L = {(1 / 1 / 1 / 2)}

4) L = {(1 / 4 / 1 / 3)}

5) L = {(1 / 4 / 2 / -4)}

6) L = {(5 / 2 / 4 / -3)}

7) L = {(6 / -1 / 1 / -2)}

8) L = {(7 / 3 / 1 / 2)}