mole practice test

Multiple Choice

1b	2b	3d	4d	5b	6b	7b	8c	9d	10a	11a
12b	13d	14d	15b	16c	17d	18c	19d	20a	21a	22d
23c	24c	25d	26d	27a	28a	29d	30d	31d	32a	33d

Written

1. Chemist has 1.71×10^{-3} moles, therefore chemist does not have enough because s/he needs 2.00×10^{-3}.

2. 201845 g/year = 202 kg/year

3. 613 g $CuSO_4$,   3.84 mol $CuSO_4$

4. $C_7 H_6 O_2$

    No, I do not agree because it is a different formula than $C_{12} H_{14} O_2$

5. Emperical formula = $C_2 H N O_2$

    Ratio = 3

    actual formula (molecular formula) = $C_6 H_3 N_3 O_6$

6. 50. L

7. 0.70 mol

8. 57.9 degrees celsius

9. 15.6 g CO

10. 1.74×10^{24} atoms