A.55

(2) a) 1,0 u b) 4,0 u c) 14,0 u d) 24,3 u e) 32,1 u
f) 35,5 u

(3) Koska ne lasketaan kyseisen alkuaineen isotoopien massojen keskiarvona.

(4) a) $m_H = 1{,}0\ u$, $m_C = 12{,}0\ u$ $\quad \frac{12{,}0\ u}{1{,}0\ u} = 12$ - kertainen

b) $m_{He} = 4{,}0\ u$ $\quad \frac{12{,}0\ u}{4{,}0\ u} = 3$ - kertainen

(5) $m_O = 16{,}0\ u$
Rikki, koska $m_S = 32\ u$

(6) 1 u

(7) Ks. t. 3 (8) Ks. t. 3

(9) 1 mol (mooli) (10) 1 mol = $6{,}02 \cdot 10^{23}$ kpl

(12) $M(C_2H_5OH) = 2 \cdot 12{,}0\ g/mol + 6 \cdot 1{,}0\ g/mol + 16{,}0\ g/mol = \underline{\underline{46{,}0\ g/mol}}$

(14) c) $\boxed{n = \frac{m}{M}}$

n = ainemäärä mooleina ?
m = kokonaismassa = 110 g
M = moolimassa =
$M(CO_2) = 12{,}0\ g/mol + 2 \cdot 16\ g/mol = 44{,}0\ g/mol$

$$n = \frac{110\ g}{44{,}0\ g/mol} = \underline{\underline{2{,}5\ mol}}$$