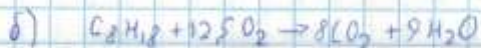


10-7

185



$$\text{II} \quad m(\text{densitas}) = 10000 \text{ kg} \cdot 0,8 \text{ / m}^3 = 8000 \text{ kg}$$

$$\text{III} \quad m(\text{udara}) = 8000 \cdot 0,2 = 1600 \text{ kg}; \quad n(\text{udara}) = \frac{16000}{100} = 16 \text{ mol}$$

$$m(\text{oksigen}) = 8000 \cdot 0,8 = 6400 \text{ kg}; \quad n(\text{oksigen}) = \frac{6400}{114} = 56,11 \text{ mol}$$

$$\text{IV} \quad n(O_2)_1 = 16,11 = 176 \text{ mol}$$

$$n(O_2)_2 = 56,11 \cdot 12,5 = 701,75 \text{ mol}$$

$$n(O_2)_3 = 176 + 701,75 = 877,75 \text{ mol}$$

$$V(O_2) = 19661,6 \text{ L}$$

$$\text{V} \quad V(\text{bay}) = \frac{V(O_2)}{p(O_2)}; \quad V(\text{bay}) = \frac{19661,6}{0,21} = 93626,66 \text{ L}$$

$$\text{VI} \quad n(CO_2)_1 = 16,7 = 112 \text{ mol}$$

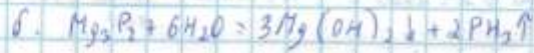
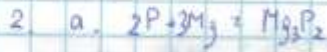
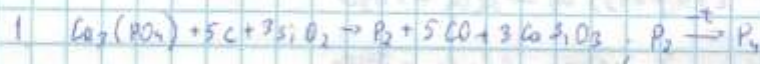
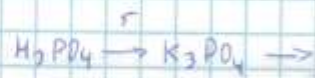
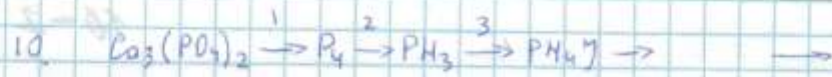
$$n(O_2)_2 = 50,148 = 499,12 \text{ mol}$$

$$n(CO_2)_3 = 112 + 499,12 = 611,12 \text{ mol}$$

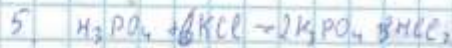
$$V(CO_2) = 611,12 \cdot 22,7 = 12568,08 \approx 12,57 \text{ m}^3$$

$$\text{Jawab: } 12,57 \text{ m}^3$$

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4.



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