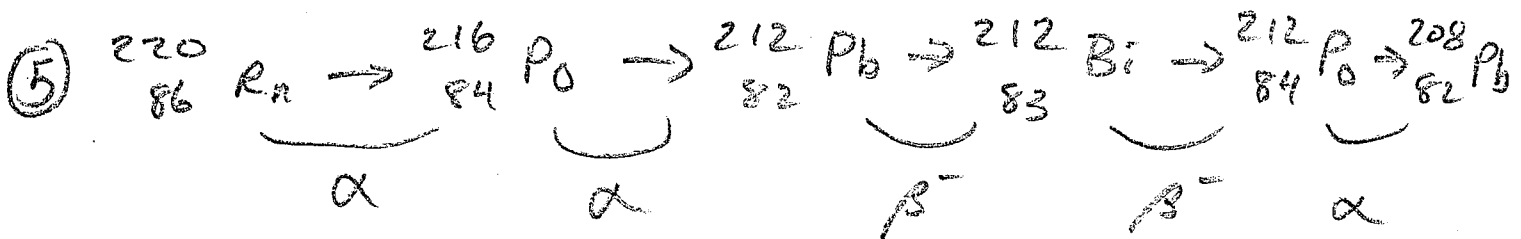
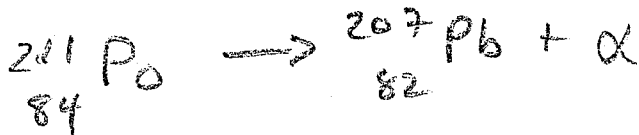
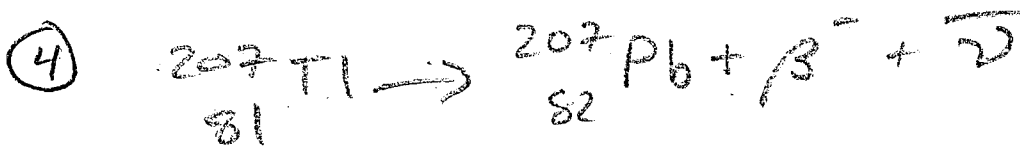
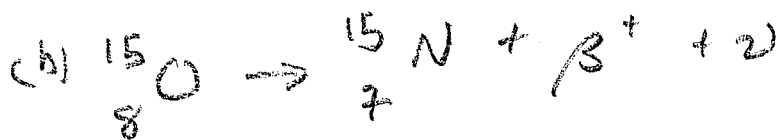
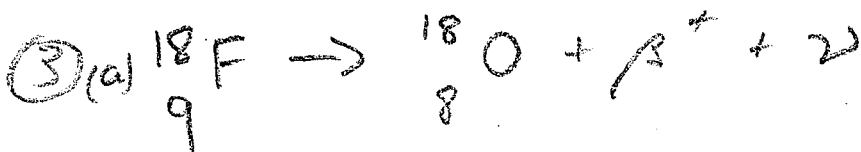


# Nuclear Physics Practic Problems

- ① (a) Re  $n = 120$   
 (b) S  $n = 16$   
 (c) Cu  $n = 34$   
 (d) B  $n = 6$   
 (e) Pu  $n = 145$

- ② (a) 92      (b) 122      (c) 41



3  $\alpha$  and 2  $\beta^{-}$

$$\textcircled{6} \quad \frac{N}{N_0} = \frac{1}{2^n} \quad \frac{1}{8} = \frac{1}{2^n} \quad n = 3$$

$$n = \frac{t}{T_{1/2}} \quad T_{1/2} = \frac{t}{n} = \frac{9}{3} = \underline{3 \text{ days}}$$

$$\textcircled{7} \quad n = \frac{t}{T_{1/2}} = \frac{30}{8.04} = 3.7 \approx 4$$

$$\frac{N}{N_0} = \frac{1}{2^4} = \frac{1}{16} = 0.0625 = \underline{6.3\%}$$