

Homework #3

1. 20 mM Tris from 1M:

$$C_1V_1 = C_2V_2 \quad 1 \text{ M} = 1000 \text{ mM}$$

$$(1000 \text{ mM}) \times V_1 = (20 \text{ mM}) \times 100 \text{ ml}$$

$$V_1 = \frac{(20 \text{ mM}) \times 100 \text{ mL}}{(1000 \text{ mM})}$$

$$= 2.0 \text{ ml of 1 M Tris}$$

- 0.5 mM EDTA from 0.5 M

$$C_1V_1 = C_2V_2 \quad 0.5 \text{ M} = 500 \text{ mM}$$

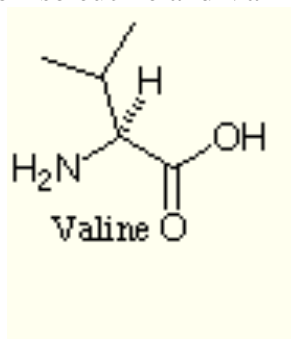
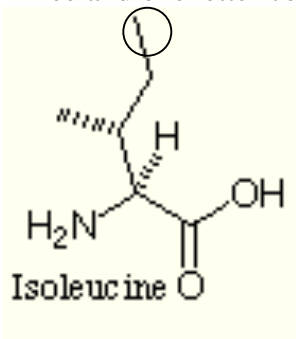
$$(500 \text{ mM}) \times V_1 = (0.5 \text{ mM}) \times 100 \text{ ml}$$

$$V_1 = \frac{(0.5 \text{ mM}) \times 100 \text{ mL}}{(500 \text{ mM})}$$

$$= 0.1 \text{ ml or } 100 \mu\text{l of 0.5 M EDTA}$$

Add 2.0 ml of 1 M Tris and 0.1 ml of 0.5 M EDTA in a graduated cylinder and fill it up with H₂O to 100 ml.

2. Three and one letter codes of Isoleucine and Valine: see text book.



3. Asparagine and Aspartate; Glutamine and Glutamate