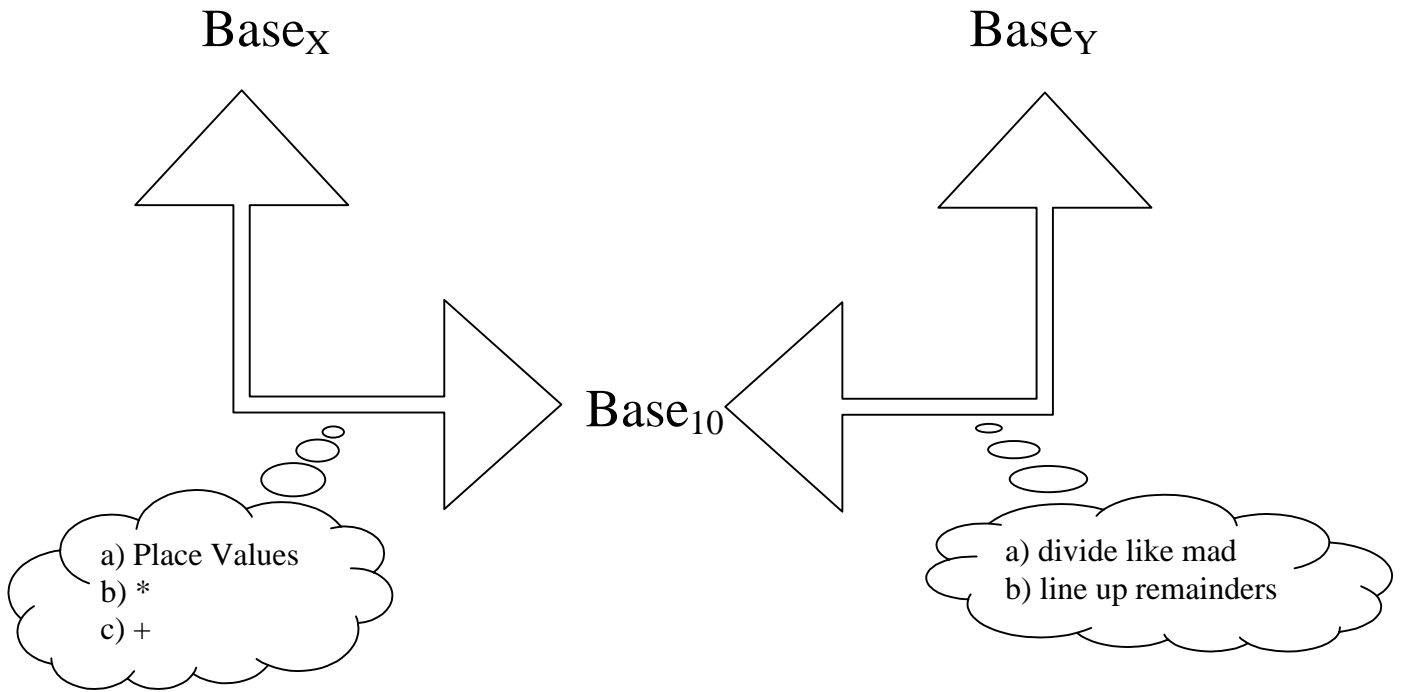


Number Systems

Conversions



Example: $345_6 = ?_{10}$

$$\begin{aligned} (3 \cdot 6^2) + (4 \cdot 6^1) + (5 \cdot 6^0) &= \\ 108 + 24 + 5 &= \\ \mathbf{137}_{10} \end{aligned}$$

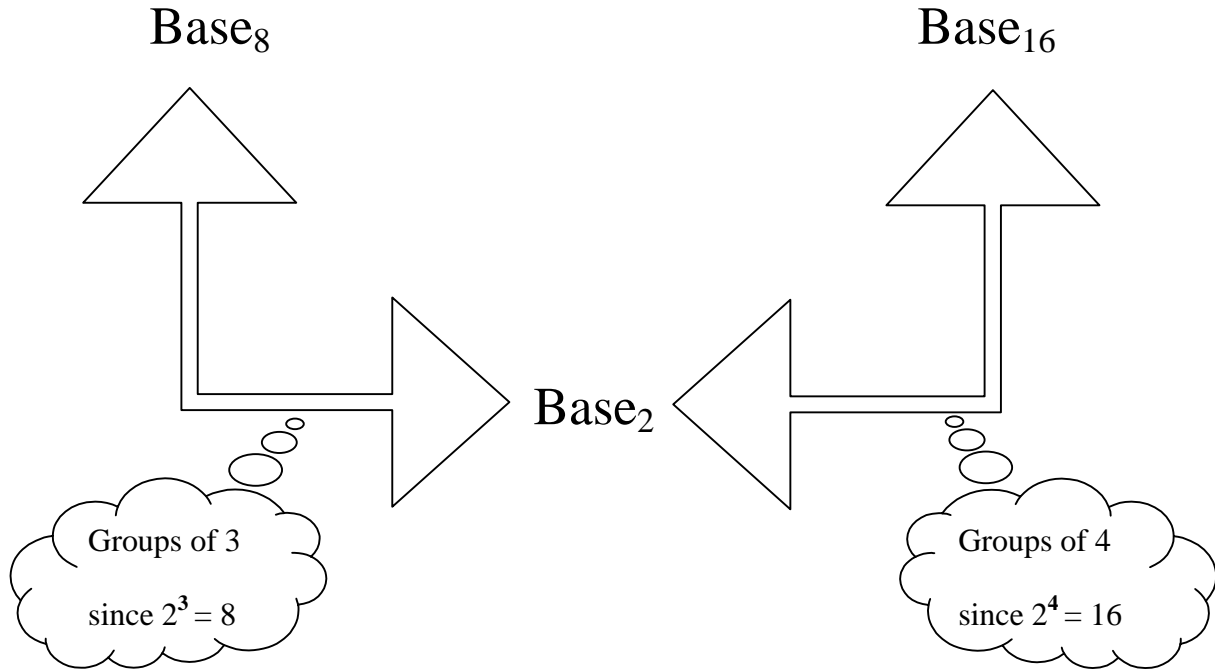
Example: $2351_{10} = ?_{12}$

$$\begin{array}{r} 2351 \div 12 = 195 \text{ R}11 \text{ (B)} \\ 195 \div 12 = 16 \text{ R}3 \\ 16 \div 12 = 1 \text{ R}4 \\ 1 \div 12 = 0 \text{ R}1 \end{array}$$

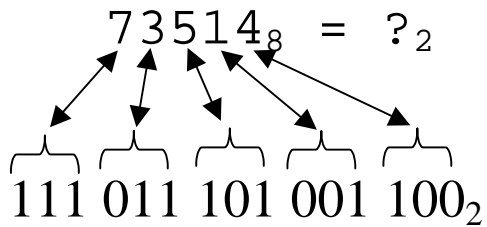
means stop

line up remainders lft. to rt. = $\mathbf{143B}_{12}$

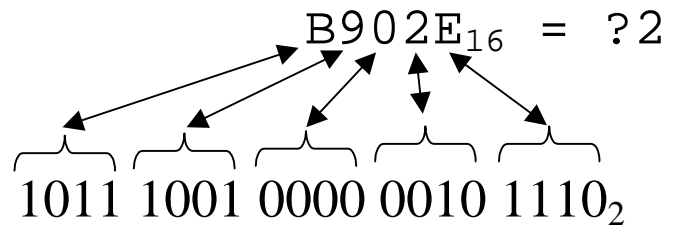
Friendly Computer Bases (no math required)



Example:



Example:



Note: These examples work in reverse as well – just follow the arrows backwards.