

# Chapter 1 Summary

Friday, January 10, 2020

11:00 AM

convert from other base to decimal

expansion method

$$132_4 = 1 \times 4^2 + 3 \times 4^1 + 2 \times 4^0 \\ = 30$$

convert from decimal to other base

repeated division

30  $\rightarrow$  base 4

|             | Q | R |
|-------------|---|---|
| $30 \div 4$ | 7 | 2 |
| $7 \div 4$  | 1 | 3 |
| $1 \div 4$  | 0 | 1 |



convert between binary, octal, and hexadecimal

$$37_8 = 011 \ 111 = 1 \ 1111 = 1F_{16}$$