

Binary $2^{n-1} \dots 2^3 2^2 2^1 2^0$

Octal $8^{n-1} \dots 8^3 8^2 8^1 8^0$
weight structure

weight: $8^3 8^2 8^1 8^0$

Digits: 2 3 7 4

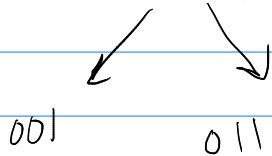
Sum of weights

$$= (2 \times 8^3) + (3 \times 8^2) + (7 \times 8^1) + (4 \times 8^0)$$
$$= (2 \times 512) + (3 \times 64) + (7 \times 8) + (4 \times 1)$$

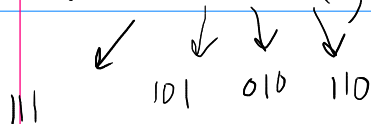
$$= 1276_{10}$$

$$2374_8 = 1276_{10}$$

a. $13_8 = 001\ 011_2$



b. $7526_8 = 111\ 101\ 010\ 110_2$



$$a. \quad \underbrace{110}_5 \quad \underbrace{101}_6 \quad {}_2 = 56_8$$

$$b. \quad \underbrace{11}_3 \quad \underbrace{010}_2 \quad \underbrace{000}_0 \quad \underbrace{100}_4 \quad {}_2 = 3204_8$$