Notation

For graphs used in class:

V is a set of consecutive integers starting at 0.

E.g., $V = \{0, 1, 2\}$.

Integers sometimes expressed in radix-k form.

Let i, k, and a be positive integers.

Then notation $i_{(a)}$ indicates digit a in i's radix-k representation.

Digit 0 is the least significant.

Digit notation can be juxtaposed: $i = i_{(n-1)} i_{(n-2)} \cdots i_{(0)}$,

where n is the number of radix-k digits in i.

Examples:

Let $i = 1234_{10} = 4d2_{16} = 3412_7$.

For $k = 16$, $i = i_{(2)} i_{(1)} i_{(0)} = 4d2$ and so $i_{(2)} = 4$, $i_{(1)} = \mathtt{d}$, $i_{(0)} = 2$.

For $k = 7$, $i = i_{(3)} i_{(2)} i_{(1)} i_{(0)} = 3412$ and so $i_{(3)} = 3$, $i_{(2)} = 4$, $i_{(1)} = 1$, $i_{(0)} = 2$.