

Lesson 9

A9.1) Perform addition of $A = \frac{5}{8}$ and $B = \frac{-4}{8}$ using the following number representation

- 2's complement
- 1's complement
- Sign magnitude

A9.2) Perform multiplication of $A = \frac{-6}{8}$ by 5 using the following number representation

- 2's complement
- 1's complement
- Sign magnitude

A9.3) Perform addition of two (a) 16-bit (b) 15-bit number using carry-select adders and minimum delay. Assume $t_{mux} = 2ns$ and $t_{FA} = 2ns$.

A9.4) Convert $a = (1.11011)_2$ to canonic signed digit (CSD) number representation