郑浩博 3210105321

1.9 Yes, If we use natural languge definitely and without ambiguity, it is capable.

1.11

(a) lacks finiteness: add 1 to variable x, repeat forever

(b) lacks effectiveness: take the largest prime number (computability)

(c) lacks definiteness: ~~work~~ walk in school.

1.16

possible operand; data types; addressing modes.

1.18

A single microarchitecture implement only one ISA.
Many microarchitecture could exist for same ISA

2.8

a. 01111111 ; 127

b. 10000000 ; -128

c. $2^{n-1}-1$

d. -2^{n-1}

2.14

a. 1100

b. 1010

c. 1111

d. ~~0101~~ 1011

e. 10000

2.22

0111 0000 0000 0000

add 0111 0000 0000 0000

2.24

1111 0000 0000 0000

add 1111 0000 0000 1111

2.27

Yes, there is a problem that two positive number add up but result is negative number

2.34

a. 0111

b. 0111

c. 1101

d. 0110