Assignment 1 Answers Shortly

1.

a)

A is minimum 1000 0000 = $(-128)_{10}$

A is maximum 0110 0000 = $(+96)_{10}$

b)

A is minimum 1110 0001 = $(225)_{10}$

A is maximum 1111 1111 = $(255)_{10}$

2.

a)

(E + a) (F + a') (E + F) =? (E + a) (F + a')

For left side:

(E + a) (F + a') (E + F)

= (E + a) (F + a') (E + F **+ (a a')**)

= (E + a) (F + a') (E + F + a) (E + F + a')

= (E + a + (F.0)) (F + a' + (E.0))

= (E + a) (F + a')

b)

(b'c+d+a) (bc+bd+a') (b'c+d+bc+bd) =? (b'c+d+a) (bc+bd+a')

Prove is same as a). You can minimize the expressions by using axioms and theorems and find same equations on both sides of the equality.