

a.  $0x A8 = 0b 10101000$

unsigned decimal: -88  
signed decimal: 168

b.  $0x01495822$

↓

0000 0001 0100 1001 0101 1000 0010 0010  
op rs rt rd shamt funct

op = 000000 = 0

rs = 01010 = 10 = t2

rt = 01001 = 9 = t1

rd = 01011 = 11 = t3

shamt = 00000 = 0

funct = 100010 = 34 = sub

sub \$t3, \$t2, \$t1

c.  $0x A0000000 = 0b \underbrace{1010}_{\text{bit}} \underbrace{0000}_{\text{expo}} 0000 0000 0000 0000 0000 0000$

expo = 01000000 = 16

Q6 = 3.141592653

S = 0

expo = 10000000

frac = 1001001000011111011011

= 0100000001001001000011111011011

= 40490fdb