

Quiz #8
Monday, June 5th

1. Circle one. Which of the following will correctly initialize the value of the Q32 fixed-point real variable “x” to 1.0?

a. Q32 x = 1.0 ;
b. Q32 x = 1 ;
c. Q32 x = Q32Ratio(1, 1) ;

2. Circle one. Which of the following is the correct hexadecimal representation of 1.0 as a Q32 number?

a. 0000000100000000₁₆
b. 0000000000000001₁₆

3. Variables x, y and z are Q32 numbers. Circle those C assignment statements that properly compute the intended result.

a. z = z + 1 ; // add 1 to z
b. z = x + y ; // z ← sum of x and y
c. z = x - y ; // z ← difference of x less y
d. z = x * y ; // z ← product of x and y
e. z = x / y ; // z ← quotient of x divided by y
f. z = x % y ; // z ← remainder of x divided by y
g. z = x << 2 ; // z ← 4*x
h. z = -x ; // z ← the negative of x

4. True/False: A printf statement in C can display the value of a Q32 variable using one of the standard format specifiers, such as %d, %u, etc.

False