

Which number below has the largest value?

A.  $24_8 = 2 \times 8 + 4 = 20_{10}$

 B.  $20_{16} = 2 \times 16 + 0 = 32_{10}$

C.  $22_{10} = 2 \times 10 + 2 = 22_{10}$

## Worked example

What is  $X$ ?

Given that

$$\frac{3EA_{16} - 156_7}{X_8} = 49_{12}$$

## Worked example (cont)

Convert each value  
to decimal:

$$\frac{3EA_{16} - 156_7}{X_8} = 49_{12}$$

$$3EA_{16} = 3(16^2) + 14(16) + 10 = 1002_{10}$$

$$156_7 = 1(7^2) + 5(7) + 6 = 90_{10}$$

$$49_{12} = 4(12) + 9 = 57_{10}$$

$$(1002 - 90) / 57 = 16_{10} = 20_8$$

Therefore  $X = 20$

Is this a sequence of Gray codes?

010 -> 110 -> 100 -> 000 and

repeats

☒ **A. Yes**

**B. No**

**C. Not sure**

only 1 bit change  
from one codeword  
to the next