QUIZ!

Quiz Stuff

Use a full sheet of 8½x11" paper. (Half sheet? Half credit!)

Put your last name and NetID in the far upper left hand corner of the paper, **where a staple would hit it.** (It helps us sort quizzes!)

Mitchell, whm

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No need to write out questions.

Numbering responses may help you avoid overlooking a question; it's ok to go ahead and pre-number your sheet.

It's ok to abbreviate, like using "otw" for "otherwise".

1. Write a function **f** such that **f x** returns **7**, no matter what the value of **x** is.

2. Given a function **g** with type **Char -> (Int -> Bool)**, what is the <u>type</u> of each of the following two expressions?

   g 'x'
   g 'x' 5

3. Using <u>guards</u> to handle cases, write a function **roman** such that
   roman 5 returns **'V'**
   roman 10 returns **'X'**
   roman anything else returns **'?'**

4. Extra credit (½ point): What's the type of **roman**?

1. f x = 7

2. > let g char ordval = ord char == ordval

   > :type g
   g :: Char -> Int -> Bool

   > :type g 'x'
   g 'x' :: Int -> Bool

   > :type g 'x' 5
   g 'x' 5 :: Bool

3.
```
roman n
    | n == 5 = 'V'
    | n == 10 = 'X'
    | otherwise = '?'
```

```
> roman 5
'V'
> roman 10
'X'
> roman 3
'?'
> :type roman
roman :: (Eq a, Num a) => a -> Char
```