| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U |
| Spreadsheets |

**COMPSCI 111 / 111G**

*Mastering Cyberspace:*

*An introduction to practical computing*

Spreadsheets
Exercises

Exercise 1: Is the reference to cell D6 in the formula =$D$6*2 a relative or an absolute reference?

• An absolute reference

Imagine that you are keeping track of the sales for tickets at the Olympic games. A number of different sports are located in different venues. Each venue has a number of seats available. Your spreadsheet will keep track of the number of tickets available and the number actually sold.

Exercise 2: Given the following spreadsheet, what formula would you use in cell D6 to calculate the number of tickets remaining?

=B6  -  C6
Exercises

Exercise 3: What formula would you use in cell E8 to calculate the money made from ticket sales?

![Ticket Sales Table]

=\text{C8} \times \$\text{B3}

Exercise 4: What formula would you use in cell B11 to calculate the total number of tickets available?

![Ticket Sales Table]

=\text{B6} + \text{B7} + \text{B8} + \text{B9} + \text{B10}
Boolean Logic

• **Boolean value**
  - True or False
  - 2-valued logic

• **Compare two different values**
  - =
  - >
  - <
  - >=
  - <=

• **Example.** Are the following true or false?
  - = (3 = 4)  False
  - = (4 < 6)  True
  - = (MAX(5, 6) = 5)  False
  - = (SUM(1,2,3) = 6)  True
Boolean Functions

• **AND( a, b )**
  - True only when a and b are both true

• **OR( a, b )**
  - True if either a is true or b is true

• **NOT( a )**
  - True only when a is false

• **Are the following formulae TRUE or FALSE?**
  - =AND( 3 = 4, 2 = 2 )  False
  - =OR( 7 < 5, 3 > 3 )  False
  - =NOT( 3 = 2 )  True
  - =OR( AND( 2 = 3, 4 > 3 ), NOT( 2 = 3 ) )  True