

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?

	A	B	C	D
1	Ticket Sales			
2				
3	Price	\$10.00		
4				
5	Event	Tickets Available	Tickets Sold	Remaining
6	Cycling	4000	2000	2000
7	Weightlifting	2000	750	1250
8	Triathlon	1000	100	900
9	Football	3000	3000	0
10	Badminton	5000	4500	500
11		15000	10350	4650

$=B6 - C6$

Exercises

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

	A	B	C	D	E
1	Ticket Sales				
2					
3	Price	\$10.00			
4					
5	Event	Tickets Available	Tickets Sold	Remaining	Sales
6	Cycling	4000	2000	2000	\$20,000.00
7	Weightlifting	2000	750	1250	\$7,500.00
8	Triathlon	1000	100	900	\$1,000.00
9	Football	3000	3000	0	\$30,000.00
10	Badminton	5000	4500	500	\$45,000.00

=C8 * \$B\$3

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

	A	B	C	D	E
1	Ticket Sales				
2					
3	Price	\$10.00			
4					
5	Event	Tickets Available	Tickets Sold	Remaining	Sales
6	Cycling	4000	2000	2000	\$20,000.00
7	Weightlifting	2000	750	1250	\$7,500.00
8	Triathlon	1000	100	900	\$1,000.00
9	Football	3000	3000	0	\$30,000.00
10	Badminton	5000	4500	500	\$45,000.00
11		15000	10350	4650	\$103,500.00

=B6 + B7 + B8 + B9 + 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**