EOSC 211 – Week 4 – Worksheet 1 – Computer Math

Evaluate each of the following expressions:

Exercise 1:

- 1. 2*5+2
- 2. 2+2*5
- 3. (2+2)*5
- 4. 2^2*5
- 5. 2+4*3-4
- 6. 1---5
- 7. 2+-5/-5
- 8. 2-+5+-2
- 9. 2*-5^-2
- 10.(2+2*)5

Exercise 2:

- 1. 3+[1 2 3]
- 2. 3/[1 2 3]
- 3. 3./[1 2 3]
- 4. [1 2 3].*[2 3 4]
- 5. [1 2 3].*[2;3;4]
- 6. [1 2 3]*[2;3;4]
- 7. [1 2 3]*[2 3 4]
- 8. [1 2 3]+[2;3;4]

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Exercise 3:

- 1. [2 3 4]<=[3 3 5]
- 2. 5>3*2
- 3. 5*3>2
- 4. 6+3 ~= 3^2
- 5. 2+5>4:7
- 6. 5<3<1
- 7. [2 3 4]>=[3;3;4;5]
- 8. 3^4>1
- 9. pi>3.4159

Exercise 4 (note that | and || are subtly different, as are & and &&)

take lat=5:-1:1; z=[2.1 2.2 2.3 NaN 2.5];

- 1. lat>2.5 & lat<3.2
- 2. lat<2.5 & lat>4.2
- 3. lat<1.5 | lat>4.2
- 4. z(round(lat)==3)
- 5. find(lat<2)
- 6. ~isfinite(z)
- 7. z(isfinite(z))
- 8. $ii = lat <= 4 \& lat >= 2; z(\sim ii)$
- 9. z(1)*3-6.3