

CS 100
Fall 2015
Lab #1

1. Evaluate the following MATLAB expressions by hand and use MATLAB to check the answers

- a. $2 / 2 * 3$
- b. $6 - 2 / 5 + 7 ^ 2 - 1$
- c. $10 / 2 \setminus 5 - 3 + 2 * 4$
- d. $3 ^ 2 / 4$
- e. $3 ^ 2 ^ 2$
- f. $2 + \text{round}(6 / 9 + 3 * 2) / 2 - 3$
- g. $2 + \text{floor}(6 / 9 + 3 * 2) / 2 - 3$
- h. $2 + \text{ceil}(6 / 9 + 3 * 2) / 2 - 3$

2. Evaluate the following MATLAB expressions by hand and use MATLAB to check the answers.

- a. $1+2*3$
- b. $(1+2)*3$
- c. $4/2+1$
- d. $1+4/2$
- e. $4/(2+1)$
- f. $8^2/3$
- g. $8^{(2/3)}$
- h. $12/2/3$
- i. $12/(2*3)$
- j. 4^3^2
- k. $4^{(3^2)}$
- l. $(4^3)^2$

3. Evaluate the following MATLAB expressions by hand and use MATLAB to check the answers.

- a. $\frac{1}{2x3}$
- b. 2^{2x3}
- c. $\sqrt{(3-6)^2 + (5-9)^2}$

4. Evaluate the following MATLAB expressions by hand and use MATLAB to check the answers.

- a. $x = 3 > 2$
- b. $x = 2 > 3$
- c. $x = -4 \leq -3$
- d. $x = 1 < 1$
- e. $x = 2 \sim= 2$
- f. $x = 3 == 3$
- g. $x = 0 < 0.5 < 1$

5. Set the variables, A, B, and C to the logic values:

```
A=true  
B=false  
C=true
```

Evaluate the following MATLAB expressions by hand and use MATLAB to check the answers.

- a. the logical AND of A and B
- b. (the logical AND of A and B) combined with the logical OR of C
- c. the logical EXCLUSIVE OR of A and B
- d. the logical NOT of A