Pg: 53: Precedence & Associativity of Operators:

① a=-3;
a=-a-a++a;
a=-(-3)-(-3)++(-3)
a=-(-3)-(-3)
a=6

② a=2, b=1, c, d;
c=a<b; (F<b)..0
d=(a>b)&&(c<b);
(True) (True)
c=1, d=1

③ a=9, b=15, c=16, d=12, e, f;
e=!(a<b||b<c); e=
(True) (True)
f=(a>b)?a-b:b-a;
e=? f=?
e=0 f=6

④ int a=5;
a=6; ✓
a=a+5*a = 6+5*6
a=6+30 = 36

⑤ a=5, b=5
Pf(++a,b--) => 6,5
Pf(a,b) => 6,4
Pf(a,b,b++) => 7,4
Pf(++a,b) = 7,5

⑥ x,y,z;
x=8++; X
y=++x++; X
z=(x+y)--; X
It is an error where Incr, dec can't be used here

⑦ a=4, b=8, c=3, d=9, z;
z=a++ + ++b * c-- --d;
z=4+9*3-8
z=4+27-8=23
a=5, b=9, c=2, d=8

⑧ a=14, b, c;
a=a%5=4 ✓
b=a/3=1
c=a/5%3=4/5%3=0
c=0 ✓

⑨ a=15, b=13, c=16, x, y;
x=a-3%2+c*2/4%2+b/4;
x=15-1+16*2/4%2+13/4
x=14+32/4%2+13/4
x=14+0+3=17.
y=a=b+5-b+9b;
=13/+5-13+9/3
=18 5+3
x=17 / y=8 ✓

10) x, y, z, k = 10;

k += (x=5, y=x+2, z=x+y)

k += (x=5, y=7, z=12)

x=5, y=7, z=12

k += 12 ⇒ k = 10 + 12

k = 22 ✓

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11) int a; float b;

b = 15.5;

Pf("%.f", b) ⇒ 7.500000

b = (float) 15/2 + 15/2

= 7.500000 + 7

= 14.500000

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12) a = 9; char ch = 'A';

a = a + ch + 24

Pf("%d, %c", a, a, ch, ch, a, a);

ch = 65, A

a = 9 + 65 + 24 = 98

a = 98 ⇒ b

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13) a, b, c, d; a = b = c = d = 4;

a* = b + 1; a = 5 * 4 = 20

a c* = d* = 3 ⇒ c* = 12

c = 12 + 4 = 16

a = 20, c = 16 ✓

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14) a = 5, b = 10, temp;

temp = a, a = b, b = temp;

↳ 5, a = 10, b = 5

a = 10

b = 5 ✓ (swap)

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15) a = 10, b = 3, max;

(a > b ? max = a : max = b)

10 > 3 ? 10 : 3

= 10

---

16) a = 5, b = 6

a = b ⇒ a = 6

a == b ⇒ 1 (compared)

a = 6, b = 6

---

17) a = 3, b = 4, c = 3, d = 4

x, y;

a = 5, b = 7, c = 9, d = 8

x = 1, y = 1.

a = 5, b = 7, c = 8, d = 10

x = 0, y = 1

(18) a = 10; (Depends on compiler)

a = a++ * a--; ✗

a = 10 * 10 = 100

Explained in class

(19) a = 2, b = 2, x, y;

x = 4 * (++a * 2 + 3);

y = 4 * (b++ * 2 + 3);

x = 4 * (3 * 2 + 3) = 36

y = 4 * (2 * 2 + 3) = 28

a = 3, b = 3, x = 36, y = 28

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