

C) Answer the following

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|---|----------|
| 1) if $x = 50$ then what is $x++$? | 1) _____ |
| 2) if $x = 50$ then what is $++x$? | 2) _____ |
| 3) if $x = 50$ then what is $x--$? | 3) _____ |
| 4) if $x = 50$ then what is $--x$? | 4) _____ |
| 5) if $x = 50$ then what is y after $y = x++$? | 5) _____ |
| 6) if $x = 50$ then what is y after $y = ++x$? | 6) _____ |
| 7) if $x = 50$ then what is y after $y = x--$? | 7) _____ |
| 8) if $x = 50$ then what is y after $y = --x$? | 8) _____ |

Turn in this sheet to be graded!

I. A) Assignment (3.2)

1a) Open **AP1ch03lab01a.java**

b) Run and write the output:

if x = 10 then x++ = _____

2a) Change the ++ in both lines to --

b) Run and write the output:

if x = 10 then x-- = _____

3a) Change the -- in both lines to ++ and rewrite the lines:

++x;

System.out.println(" then ++x = " + x);

b) Run and write the output:

if x = 10 then ++x = _____

4a) Change the ++ in both lines to --

b) Run and write the output:

if x = 10 then --x = _____

B) Assignment (extra not covered in our book)

1a) Open and run **AP1ch03lab01b.java**

b) Write the output:

if x = 10 and y = 0 then y in y = x++ is _____ and x is now _____

2a) Change the ++ in both lines to:

y = ++x;

System.out.println(" then y in y = ++x is " + y + " and x is now " + x);

b) Run & write the output:

if x = 10 and y = 0 then y in y = ++x is _____ and x is now _____

3a) Change the ++ in both lines to:

y = x--;

System.out.println(" then y in y = x-- is " + y + " and x is now " + x);

b) Run & write the output:

if x = 10 and y = 0 then y in y = x-- is _____ and x is now _____

4a) Change the -- in both lines to:

y = --x;

System.out.println(" then y in y = --x is " + y + " and x is now " + x);

b) Run & write the output:

if x = 10 and y = 0 then y in y = --x is _____ and x is now _____

Summary: When ++ is used with a *single* variable like **x++**; or **++x**; then they both mean the assignment: **x = x + 1**; and likewise for **x--**; or **--x**; both mean the assignment: **x = x - 1**; When ++ is used on the right hand side of an assignment like **y = x++**; or **y = ++x**; it matters whether the ++ is first or last. In both cases the x variable is incremented by 1. In the first one (y = x++;) y is assigned the value of x *before* x is incremented while in the second one (y = ++x;) y is assigned the value *after* x is incremented likewise for **y = x--**; or **y = --x**;

OVER