

- A. $10 + 20 = 30$ int
- B. $10 + 20 - 3 = 27$ int
- C. $50 - 10 * 3 = 20$ int
- D. $(50 - 10) * 3 = 120$ int
- E. $20 / 10 = 2$ int
- F. $10 / 20 = 0$ int
- G. $10.0 / 20 = 0.5$ double
- H. $30 \% 20 = 10$ int

Are the results as you would expect? **Yeah the answers are okay** Why does expression C give a different result from D? **This is because of the introduction of brackets which makes the order of solving the equation a little different.** Why does G give a different result from F? **The value of G comes back as a double because the first number is not an integer.**

Are the results as you would expect? **Yeah**

- A. $a + b + c = 35$ int
- B. $a * c - b = 90$ int
- C. $a * (c - b) = 50$ int
- D. $b / c = 0$ int
- E. $y / c = 0.5$ double

Which ones did not change value, and why? **The last two did not change as they are not affected by a**

- A. $a + b + c = 60$ int
- B. $a * c - b = 590$ int
- C. $a * (c - b) = 300$ int
- D. $b / c = 0$ int
- E. $y / c = 0.5$ double

- A. $a < 10 = \text{true}$ boolean
- B. $a \leq 10 = \text{true}$ boolean
- C. $c == d = \text{true}$ boolean
- D. $c == b = \text{false}$ boolean
- E. $c != d = \text{false}$ boolean
- F. $x = \text{true}$ boolean
- G. $(a == 10) \&\& x = \text{false}$ boolean
- H. $(a < 10) \&\& (c == d) = \text{true}$ boolean
- I. $(a < 10) \|\| (c == d) = \text{true}$ boolean
- J. $(a > 10) \&\& (a < 20) = \text{false}$ boolean
- K. $(a \geq 10) \&\& (a < 20) = \text{false}$ boolean

Are the results as you would expect? **I'm quite surprised because for some values they gave me a different result as to my expectations.**

- A. a is between 0 and 6 (that is, in the range 1,2,...,5) $a < 6$

- B. b is not between 0 and 5 **b>5**
- C. at least one of a and b is equal to 10 **a<10 ||b==10**
- D. of the values of a, b and c, a is the smallest and c is the largest **a<c**

What expression would evaluate the current value of a variable myVar and then decrement the variable's value? **A--**

Enter the following statement (note that a statement ends with a semi-colon).

a = a * 2;

What output do you see? **I think I inputted the expression twice and thats why my output is 32 (int)**

- A. **int e = b * c;**
- B. **b += 20;**
- C. **b *= b;**
- D. **c *= c + 5;**
- E. **a--;**
- F. **double z = b / 20.0**
- G. **System.out.println("Hello");**
- H. **System.out.println(a);**

Now devise and test statements that do each of the following. Take a note of each statement that you devise and the result of your test.

- A. Declares a new double variable varA and initialises its value to 2.5 **var A = 2.5;**
- B. Subtracts 2 from c using a shortcut assignment operator **c-2**
- C. Declares a new int variable varB and initialises its value to the product of a and c **var B = a*c;**
- D. Outputs the sum of a and b to the terminal window **System.out.println(a+b);**