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| **B-Day** | **Drills** | **Answer** |
| Jan 28 | Snow Day | Snow Day |
| Feb 01 | Which of the following expressions does not evaluate to 0.4?   1. (int)4.5 / (double) 10; 2. (double) (4 / 10); 3. 4.0 / 10; 4. 4 / 10.0; 5. (double)4 / (double) 10; | A |
| Feb 03 | Assuming that *x, y,* and *z* are integer variables, which of the following three logical expressions are equivalent to each other, that is, have the same values for all possible values of *x, y,* and *z*?   1. (x == y && x != z) || (x != y && x ==z) 2. (x == y || x == z) && (x != y || x != z) 3. (x == y) != (x == z) 4. I and II only 5. II and III only 6. I and III only 7. I, II, and III 8. None of the above | D |
| Feb 05 | The expression !((x <= y) && (y > 5)) is equivalent to which of the following?   1. (x <= y) && (y > 5) 2. (x <= y) || (y > 5) 3. (x >= y || ( y< 5) 4. (x > y) || (y <= 5) 5. (x > y) && (y <= 5) | D |
| Feb 09 | int x = 0, y = 3;  String op = “/”;  if (op.equals(“/”) && (x != 0) && (y/x > 2))  {  System.out.println(“OK”);  }  else  {  System.out.println(“Failed”);  }  Which of the following statements about this code is true?   1. There will be a compile error because *String* and *int* variables are intermixed in the same condition. 2. There will be a run-time divide-by-zero error. 3. The code will compile and execute without error; the output will be *OK*. 4. The code will compile and execute without error; the output will be *Failed*.   The code will compile and execute without error; there will be no output. | D |
| Feb 11 | The expression 5 + 6 \* 3 % 2 – 1 evaluates to:   1. 0 2. 1 3. 4 4. 10 5. 13 | C |
| Feb 16 | Given the following declarations:  int m = 18;  int n = 4;  What is the value of m / n + m % n?   1. 0 2. 2 3. 6 4. 6.5 5. 10.5 | C |
| Feb 18 | Which statement would we use to create an object from a class called *Thing*?   1. Thing something; 2. Thing something = Thing(); 3. Thing something = new Thing; 4. Thing something = new Thing(); 5. New Thing() = something; | D |
| Feb 23 | What is the output produced by the following statement? Explain.  System.out.println (“50 plus 25 is ” + 50 + 25); | 50 plus 25 is 75 |
| Feb 25 | The expression !f || g is the same as which of the following?   1. f || !g 2. !(f || g) 3. !(f && g) 4. !(!f && !g) 5. !(f && !g) | E |
| Feb 29 | Suppose we have a variable *something* that is a reference to a Thing object. How would we call the method *doIt* on our Thing object?   1. doIt() 2. something.doIt() 3. doIt(something) 4. something/doIt 5. something(doIt) | B |
| Mar 02  Interims | What will be printed by the following code segment?  Boolean flag = true;  int x = -1;  if (flag && (x > 0))  System.out.println(“yes”);  else if (x == 0)  System.out.println(“maybe”);  else if (!flag)  System.out.println(“sometimes”);  else  System.out.println(“no”);   1. yes 2. maybe 3. sometimes 4. no 5. There will be an error because you can’t mix integers and Booleans in the same expression. | D |
| Mar 04 | Explain what is happening as the code is carried.  for (int i = 0; I < 10; i++)  {  myIntArray[i] = i \* 3;  } | For each iteration of the loop, the value of myIntArray at i will become i \* 3 |
| Mar 08 | int[ ] myArray = new int[10];  for (int i = 0; i < 10; i++)  {  myArray[i] = i + 2;  }  System.out.println(myArray[5]);  String myName[ ] = {“Joe”, “Erika”, “Ramon”, “Britney”, “Cory”};  System.out.println(myName[2]);  What is the value of *myArray[5]*? | 7 |
| Mar 10 | Use the code above. What value is returned by *myName.length*? | 5 |
| Mar 14 | Use the code above. What name is returned when you reference *myName[2]*? | Ramon |
| Mar 16 | Convert this binary number to a decimal number. You must show how you do this. 1101 | 1 1 0 1  8 4 0 1  8+4+1  13 |
| Mar 18 | int value = 15;  while (value < 28)  {  System.out.println(value);  value ++;  }  What are the first and last numbers output by the code segment?   1. 15, 27 2. 15, 28 3. 16, 27 4. 16, 28 5. 16, 29 | A |
| Mar 30 | A teacher put three bonus questions on a test and awarded 5 extra points to anyone who answered all three bonus questions correctly and no extra points otherwise. Assume that the Boolean variables *bonusOne*, *bonusTwo*, and *BonusThree* indicate whether a student has answered the particular question correctly. Each variable was assigned true if the answer was correct and false if the answer was incorrect.  Which of the following code segments will properly update the variable grade based on a student’s performance on the bonus questions?   1. if (*bonusOne* && *bonusTwo* && *bonusThree*)   grade += 5;   1. if (*bonusOne* || *bonusTwo* || *bonusThree*)   grade += 5;   1. if (*bonusOne*)   grade += 5;  if (*bonusTwo*)  grade +=5;  if (*bonusThree*)  grade +=5;   1. I only 2. II only 3. III only 4. I and III 5. II and III | A |
| Apr 01 | Assume that an array of integer values has been declared as follows and has been initialized.  Int[ ] arr = new int [10];  Which of the following code segments correctly interchanges the value of *arr[0]* and *arr[5]* ?   1. arr[0] = 5;   arr[5] = 0;   1. arr [0] = arr[5];   arr[5] = arr[0];   1. int k = arr[5];   arr[0] = arr[5];  arr[5] = k;   1. int k = arr[0];   arr[0] = arr[5];  arr{5} = k;   1. int k = arr[5];   arr[5] = arr[0];  arr[0] = arr[5]; | C |
| Apr 05 | ArrayList <String> items = new ArrayList<String>();  items.add(“A”);  items.add(“B”);  items.add(“C”);  items.add(0, “D”);  items.remove(3);  items.add(0, “E”);  System.out.println(items);  What is printed as a result of executing the code segment:   1. [A, B, C, E] 2. [A, B, D, E] 3. [E, D, A, B] 4. [E, D, A, C] 5. [E, D, C, B] | D |
| Apr 07 | int k = a random number such that 1 <= k <= n;  for (int p = 2; p <= k; p++)  for (int r = 1; r < k; r++)  System.out.println(“Hello”);  What is the minimum number of times that Hello will be printed?   1. 0 2. 1 3. 2 4. n – 1 5. n - 2 |  |
| Apr 11  2 hrs early | What is the maximum number of times that Hello will be printed?   1. 2 2. n – 1 3. n – 2 4. (n – 1) 2 5. n2 |  |