

Note: Correct responses are based on Java, J2sdk v 6.0, from Sun Microsystems, Inc. All provided code segments are intended to be syntactically correct, unless otherwise stated (i. e. `error` is an answer choice) and any necessary Java 2 Standard Packages have been imported. Ignore any typographical errors and assume any undefined variables are defined as used.

QUESTION 1	
$101_2 + 101_2 = ?$ A. 111_2 B. 1010_2 C. 1111_2 D. 11_{10} E. 12_{13}	
QUESTION 2	
What is output by the code to the right?	<pre>int a = 8; a = a + 2; System.out.println(a);</pre>
A. 8 B. 9 C. 10 D. 11 E. 12	
QUESTION 3	
What is output by the code to the right?	<pre>Integer b = 5; b -= 6; System.out.println(b);</pre>
A. -1 B. 0 C. 1 D. 2 E. There is no output due to a syntax error.	
QUESTION 4	
What is output by the code to the right?	<pre>for(int c=0; c<3; c++) System.out.print(c);</pre>
A. 123 B. 1234 C. 01 D. 012 E. 0123	
QUESTION 5	
What is output by the code to the right?	<pre>String d = "a dog is just a dog"; System.out.print(d.indexOf('d'));</pre>
A. 0 B. -1 C. 3 D. 2 E. 16	
QUESTION 6	
What is output by the code to the right?	<pre>double[] eRay = {8,4,7,6,5}; System.out.println(eRay[3]);</pre>
A. 5 B. 6 C. 7 D. 5.0 E. 6.0	
QUESTION 7	
What is output by the code to the right?	<pre>boolean eBoola = true; System.out.println(!eBoola);</pre>
A. yes B. no C. eBoola D. true E. false	
QUESTION 8	
What is output by the code to the right?	<pre>int fNum = 3; if(fNum == 2) System.out.println(0); System.out.println(1);</pre>
A. 10 B. 01 C. 11 D. 0 E. 1	
QUESTION 9	
Which of the following replaces <*1> in the code to the right to correctly complete the constructor?	<pre>public class Great { private int num; public Great(int n) { <*1> } }</pre>
A. <code>n=num;</code> B. <code>num=n;</code> C. <code>num=3.2;</code> D. <code>System.out.println(num);</code> E. more than one of these	
QUESTION 10	
What is output by the code to the right?	<pre>System.out.println(10 2);</pre>
A. 10 B. 2 C. 3 D. 8 E. 12	

QUESTION 11	
What is output by the code to the right? A. 2 B. 2.0 C. 8.0 D. 16.0 E. 16	<code>System.out.println(Math.pow(2,4));</code>
QUESTION 12	
What is output by the code to the right? A. 2.56 B. 2.54 C. 2.55 D. 2.53 E. 2.536	<code>System.out.printf("%.2f",2.536);</code>
QUESTION 13	
What is output by the code to the right? A. 3 B. 1 C. 2 D. 0 E. 4	<code>int[][] hMat = {{1,2,3},{4,5,6}}; System.out.println(hMat.length);</code>
QUESTION 14	
What is output by the code to the right? A. 11 B. 14 C. 17 D. 18 E. 20	<code>int iSum=0; for(int i=0; i<10; i=i+3) { iSum += i; } System.out.println(iSum);</code>
QUESTION 15	
What is output by the code to the right? A. sure B. you C. -yes D. e-yes E. -you	<code>String j = "sure-you-are-yes"; System.out.print(j.substring(11));</code>
QUESTION 16	
What is output by the code to the right? A. 427 B. 3127 C. 4225 D. 31225 E. There is no output due to a syntax error.	<code>System.out.print(3 + 1 + "2" + 2 + 5);</code>
QUESTION 17	
What is output by the code to the right? A. 12.5 B. 13 C. 12 D. 13.0 E. 14	<code>System.out.println(5 * 2.5);</code>
QUESTION 18	
What is output by the code to the right? A. false B. true C. stop D. 0 E. 1	<code>boolean k = true, m = false; System.out.println(k && (m k));</code>
QUESTION 19	
What is output by the code to the right? A. 3 B. 2 C. 6 D. 5 E. 0	<code>ArrayList<Integer> n; n = new ArrayList<Integer>(); n.add(3); n.add(2); int ans = n.get(0) * n.get(1); System.out.println(ans);</code>
QUESTION 20	
What is output by the code to the right? A. 2.5 B. 2 C. 2.0 D. 2.25 E. 3.0	<code>double dbl = 9/4; System.out.println(dbl);</code>
QUESTION 21	
What is output by the code to the right? A. 10.5 B. 11 C. 11.0 D. 11.5 E. 12.0	<code>double pNum = 2.5; while(pNum < 9) { pNum += 3; } System.out.println(pNum);</code>

<p>QUESTION 22</p> <p>What is returned by the method call <code>what (25) ?</code></p> <p>A. 7 B. 8 C. 9 D. 10 E. -1</p>	<pre>public static int what(int x) { if(x>0 && x<10) return 7; else if(x>10 && x<20) return 8; else if(x>20 && x<30) return 9; else return -1; }</pre>
<p>QUESTION 23</p> <p>What is returned by the method call <code>what (10) ?</code></p> <p>A. 7 B. 8 C. 9 D. 10 E. -1</p>	
<p>QUESTION 24</p> <p>What is output by the line marked <code>//1</code> in the client code to the right?</p> <p>A. 0 B. 1 C. 2 D. 8 E. 1.0</p>	<pre>public class Thang { private int num; public Thang(int n) { num = n; } public int getNum() { return num; } } public class Bug extends Thang { private double dec; public Bug(int d) { super(2); dec = d; } public double getDec() { return dec; } } //////////////////////////////////// //client code Thang one = new Thang(8); out.println(one.getNum()); //1 Bug two = new Bug(1); out.println(two.getNum()); //2 out.println(two.getDec()); //3</pre>
<p>QUESTION 25</p> <p>What is output by the line marked <code>//2</code> in the client code to the right?</p> <p>A. 0 B. 1 C. 2 D. 8 E. 1.0</p>	
<p>QUESTION 26</p> <p>What is output by the line marked <code>//3</code> in the client code to the right?</p> <p>A. 0 B. 1 C. 2 D. 8 E. 1.0</p>	
<p>QUESTION 27</p> <p>What is output by the line marked <code>//1</code> in the code to the right?</p> <p>A. 33 B. 44 C. 55 D. 66 E. 78</p>	<pre>Integer count = 0; Integer[] intRay = {33,44,55,66,78}; for(Integer i : intRay){ if(i.intValue()%2==0) count++; } out.println(intRay[3/2]); //1 out.println(count); //2</pre>
<p>QUESTION 28</p> <p>What is output by the line marked <code>//2</code> in the code to the right?</p> <p>A. 1 B. 2 C. 3 D. 4 E. 5</p>	

QUESTION 29 What is returned by the method call <code>wow(7)</code> ? A. 7 B. 9 C. 10 D. 11 E. 14	<pre>public static int wow(int x) { if(x>0) return 1 + wow(x-2); else return 5; }</pre>
QUESTION 30 What is returned by the method call <code>wow(11)</code> ? A. 7 B. 9 C. 10 D. 11 E. 14	
QUESTION 31 What is output by the code to the right? A. 100 B. 64 C. 49 D. 36 E. 81	<pre>String orig = "100"; int guess = Integer.parseInt(orig, 7); System.out.println(guess);</pre>
QUESTION 32 What type of tree traversal is shown by the code to the right? A. in-order traversal B. post-order traversal C. pre-order traversal D. reverse-order traversal E. level-order traversal	<pre>public void print(TreeNode tree) { if(tree != null) { out.println(tree.getValue()); print(tree.getLeft()); print(tree.getRight()); } }</pre>
QUESTION 33 What is output by the line marked <code>//1</code> in the code to the right? A. ab B. cd C. ef D. null E. 2	<pre>Stack<String> stack; stack = new Stack<String>(); stack.push("ab"); stack.push("cd"); stack.push("ef"); System.out.println(stack.pop()); //1 System.out.println(stack.peek()); //2 System.out.println(stack); //3</pre>
QUESTION 34 What is output by the line marked <code>//2</code> in the code to the right? A. ab B. cd C. ef D. null E. 2	
QUESTION 35 What is output by the line marked <code>//3</code> in the code to the right? A. [ab, cd, ef] B. [ab, cd] C. [cd, ef] D. [cd, ab] E. [ef, cd]	
QUESTION 36 What is output by the line marked <code>//1</code> in the code to the right? A. ab B. cd C. ef D. null E. 3	<pre>Queue<String> queue; queue = new LinkedList<String>(); PriorityQueue<String> pQueue; pQueue = new PriorityQueue<String>(); String[] stuff = {"cd","ab","ef"}; for(String s : stuff) { queue.add(s); pQueue.add(s); } out.println(queue.remove()); //1 out.println(pQueue.remove()); //2</pre>
QUESTION 37 What is output by the line marked <code>//2</code> in the code to the right? A. ab B. cd C. ef D. null E. 3	

QUESTION 38 What is output by the code to the right? A. -22 B. -21 C. 22 D. -23 E. 23	<pre>System.out.println(~22);</pre>
QUESTION 39 What is output by the line marked <code>//1</code> in the code to the right? A. a B. r3 C. wer3 D. 3swde E. There is no output.	<pre>String x = "a12wer32r323swde21"; String[] list = x.split("[12xy]"); out.println(list[3]); //1 out.println(list.length); //2</pre>
QUESTION 40 What is output by the line marked <code>//2</code> in the code to the right? A. 1 B. 2 C. 3 D. 4 E. 5	