1. Given a pre-generics implementation of a 14. public static void main(String[] args) {
 Answer: A method: 15. TreeSet<Integer> s = new TreeSet<Integer>();
 7. Given: 11. public static int sum(List list) {
 16. TreeSet<Integer> subs = new 5. import java.util.*;
 12. int sum = 0;
 TreeSet<Integer>();
 6. public class SortOf {
 7. public static void main(String[] args) {
 13. for (Iterator iter = list.iterator(); 17. for(int i = 606; i < 613; i++) < br/>>iter.hasNext();) {
> 18. if(i%2 == 0) s.add(i);
 8. ArrayList<Integer> a = new ArrayList<Integer>();
 14. int i = ((Integer)iter.next()).intValue();
 19. subs = (TreeSet)s.subSet(608, true, 611, 15. sum += i;
 true);
 9. a.add(1); a.add(5); a.add(3);
 16. }
 20. s.add(629);
 11. Collections.sort(a);
 21. System.out.println(s + " " + subs);
 17. return sum;
 12. a.add(2);
 18. }
 22. }
 13. Collections.reverse(a);
 What three changes allow the class to be used 23. }
 14. System.out.println(a);
 with generics and avoid an unchecked What is the result? 15. }
 A. Compilation fails. 16. }
 warning? B. An exception is thrown at runtime. (Choose three.)
 What is the result? A. Remove line 14. C. [608, 610, 612, 629] [608, 610] A. [1, 2, 3, 5] B. Replace line 14 with "int i = iter.next();". D. [608, 610, 612, 629] [608, 610, 629] B. [2, 1, 3, 5] C. Replace line 13 with "for (int i: intList) {". E. [606, 608, 610, 612, 629] [608, 610] C. [2, 5, 3, 1] D. Replace line 13 with "for (Iterator iter: F. [606, 608, 610, 612, 629] [608, 610, 629] D. [5, 3, 2, 1] intList) {". Answer: E E. [1, 3, 5, 2] F. Compilation fails. E. Replace the method declaration with "sum(List<int> intList)". 5. Given: G. An exception is thrown at runtime. F. Replace the method declaration with 1. public class Score implements Answer: C "sum(List<Integer> intList)". Comparable<Score> {
 Answer: A,C,F 2. private int wins, losses;
 8. Given 11. public interface Status {
 3. public Score(int w, int l) { wins = w; losses = l; 2. A programmer has an algorithm that } < br/> 12. /* insert code here */ int MY_VALUE = 10; requires a java.util.List that provides an 4. public int getWins() { return wins; }

 5. public int getLosses() { return losses; }
 13. } Which three are valid on line
 implementation of add(0, object), but does 6. public String toString() {
 12?
 7. return "<" + wins + "," + losses + ">";
 NOT need to support quick random access. (Choose three.) 8. }
 A. final supports these requirements? 9. // insert code here B. static A. java.util.Queue 10. } < br/> C. native B. java.util.ArrayList Which method will complete this class?
 D. public C. java.util.LinearList A. public int compareTo(Object o){/*more E. private D. java.util.LinkedList code here*/} F. abstract Answer: D B. public int compareTo(Score other){/*more G. protected code here*/} Answer: A,B,D 3. Given:
 C. public int compare(Score s1,Score 11. // insert code here
 s2){/*more code here*/} 9. Given: 12. private N min, max;
 D. public int compare(Object o1,Object 5. class Atom {
 13. public N getMin() { return min; }
 o2){/*more code here*/} Atom() { System.out.print("atom "); }
 14. public N getMax() { return max; }
 Answer: B 7. }
 15. public void add(N added) {
 8. class Rock extends Atom {
 16. if (min == null || added.doubleValue() < 6. Given: 9. Rock(String type) { System.out.print(type); } 11. public class Person {
 min.doubleValue())
>
 17. min = added;
 12. private name;
 10. }
 18. if (max == null | | added.doubleValue() > 13. public Person(String name) { 11. public class Mountain extends Rock {
 max.doubleValue())
 14. this.name = name;
 12. Mountain() {
 19. max = added;
 15. }
 13. super("granite");
 20. }
 16. public int hashCode() {
 14. new Rock("granite");
 21. }
 17. return 420;
 15. }
 18. }
 16. public static void main(String[] a) { new < hr/>
 19. } < br/> Mountain(); }
 Which two, inserted at line 11, will allow the Which statement is true? 17. }
 code to compile? (Choose two.)
 A. The time to find the value from HashMap What is the result? A. public class MinMax "<?>" { with a Person key depends on the size of the A. Compilation fails. B. public class MinMax "<? extends Number>" { B. atom granite C. public class MinMax "<N extends Object>" { B. Deleting a Person key from a HashMap will C. granite granite D. public class MinMax "<N extends Number>" delete all map entries for all keys of type D. atom granite granite E. An exception is thrown at runtime. Person. E. public class MinMax "<? extends Object>" { C. Inserting a second Person object into a F. atom granite atom granite F. public class MinMax "<N extends Integer>" { HashSet will cause the first Person object to be Answer: F Answer: D,F removed as a duplicate. D. The time to determine whether a Person

object is contained in a HashSet is constant

NOT depend on the size of the map.

and does

4. Given:

12. import java.util.*;

13. public class Explorer2 {


```
10. Click the Exhibit button.
                                                             B. Compilation of class C will fail because of an
                                                                                                                          F. sb1.concat("abc"); s1 = s1.concat("abc");
<hr/>
                                                             error in line 2.
                                                                                                                          G. sb1.append("abc"); s1 = s1 +
<img src='./scjp/10.png'></img><br/>
                                                             C. Compilation of class C will fail because of an
                                                                                                                          s1.concat("abc");
                                                                                                                          H. sb1.concat("abc"); s1 = s1 +
Which three statements are true? (Choose
                                                             error in line 6.
three.)
                                                             D. Compilation of class Almpl will fail because
                                                                                                                          s1.concat("abc");
A. Compilation fails.
                                                             of an error in line 2.
                                                                                                                          Answer: E
B. The code compiles and the output is 2.
                                                             Answer: C
                                                                                                                          18. Given that the current directory is empty,
C. If lines 16, 17 and 18 were removed,
                                                             14. Which two code fragments correctly create
compilation would fail.
                                                                                                                          and that the user has read and write
D. If lines 24, 25 and 26 were removed,
                                                             and initialize a static array of int elements?
                                                                                                                          permissions, and
compilation would fail.
                                                             (Choose
                                                                                                                          the following:
E. If lines 16, 17 and 18 were removed, the
                                                             two.)
                                                                                                                          11. import java.io.*;
code would compile and the output would be
                                                             A. static final int[] a = { 100,200 };
                                                                                                                          12. public class DOS {
                                                                                                                          13. public static void main(String[] args) {
                                                             B. static final int[] a;
F. If lines 24, 25 and 26 were removed, the
                                                             static { a=new int[2]; a[0]=100; a[1]=200; }
                                                                                                                          14. File dir = new File("dir");
                                                             C. static final int[] a = new int[2]{ 100,200 };
code would compile and the output would be
                                                                                                                          15. dir.mkdir();
                                                             D. static final int[] a;
                                                                                                                          16. File f1 = new File(dir, "f1.txt");
Answer: B,E,F
                                                             static void init() { a = new int[3]; a[0]=100;
                                                                                                                          17. try {
                                                             a[1]=200; }
                                                                                                                          18. f1.createNewFile();
11. Given:
                                                             Answer: A,B
                                                                                                                          19. } catch (IOException e) {;}
                                                                                                                          20. File newDir = new File("newDir");
10. class Line { <br/>
11. public class Point { public int x,y;} <br/>
                                                             15. Given:
                                                                                                                          21. dir.renameTo(newDir);
12. public Point getPoint() { return new Point();
                                                             10. interface Foo { int bar(); }
                                                                                                                          22.}
} <br/>
                                                             11. public class Sprite {
                                                                                                                          23.}
13. } <br/>
                                                             12. public int fubar( Foo foo ) { return foo.bar();
                                                                                                                          Which statement is true?
14. class Triangle { <br/>
                                                                                                                          A. Compilation fails.
                                                             13. public void testFoo() {
15. public Triangle() { <br/>
                                                                                                                          B. The file system has a new empty directory
16. // insert code here <br/>
                                                             14. fubar(
                                                                                                                          named dir.
17. } <br/>
                                                             15. // insert code here
                                                                                                                          C. The file system has a new empty directory
18. } <br/>
                                                                                                                          named newDir.
                                                             16.);
                                                                                                                          D. The file system has a directory named dir,
Which code, inserted at line 16, correctly
                                                             17.}
                                                                                                                          containing a file f1.txt.
retrieves a local instance of a Point object?
                                                             18.}
A. Point p = Line.getPoint();
                                                             Which code, inserted at line 15, allows the
                                                                                                                          E. The file system has a directory named
                                                             class Sprite to compile?
                                                                                                                          newDir, containing a file f1.txt.
B. Line.Point p = Line.getPoint();
                                                             A. Foo { public int bar() { return 1; }
C. Point p = (new Line()).getPoint();
                                                                                                                          Answer: E
D. Line.Point p = (new Line()).getPoint();
                                                             B. new Foo { public int bar() { return 1; }
Answer: D
                                                             C. new Foo() { public int bar() { return 1; }
                                                                                                                          19. Given:
                                                             D. new class Foo { public int bar() { return 1; }
                                                                                                                          11. class Converter {
12. Given:
                                                             Answer: C
                                                                                                                          12. public static void main(String[] args) {
11. class Alpha { <br/>
                                                                                                                          13. Integer i = args[0];
                                                                                                                          14. int j = 12;
12. public void foo() { System.out.print("Afoo
                                                             16. Given:
"); } <br/>
                                                             1. class Alligator {
                                                                                                                          15. System.out.println("It is " + (j==i) + " that
13. } <br/>
                                                             2. public static void main(String[] args) {
                                                                                                                          j==i.");
14. public class Beta extends Alpha { <br/>
                                                             3. int []x[] = \{\{1,2\}, \{3,4,5\}, \{6,7,8,9\}\};
                                                                                                                          16.}
15. public void foo() { System.out.print("Bfoo
                                                             4. int [][]y = x;
                                                             System.out.println(y[2][1]);
                                                                                                                          What is the result when the programmer
16. public static void main(String[] args) { <br/>
                                                             6. }
                                                                                                                          attempts to compile the code and run it with
17. Alpha a = new Beta(); <br/>
                                                             7. }
                                                             What is the result?
18. Beta b = (Beta)a; <br/>
                                                                                                                          command java Converter 12?
19. a.foo(); <br/>
                                                             A. 2
                                                                                                                          A. It is true that j==i.
20. b.foo(); <br/>
                                                             B. 3
                                                                                                                          B. It is false that j==i.
21. } <br/>
                                                             C. 4
                                                                                                                          C. An exception is thrown at runtime.
22. } <br/>
                                                             D. 6
                                                                                                                          D. Compilation fails because of an error in line
What is the result?
                                                                                                                          13.
A. Afoo Afoo
                                                             F. Compilation fails.
                                                                                                                          Answer: D
B. Afoo Bfoo
                                                             Answer: E
C. Bfoo Afoo
                                                                                                                          20. Given:
D. Bfoo Bfoo
                                                             17. Given:
                                                                                                                          11. String test = "Test A. Test B. Test C.";
                                                             22. StringBuilder sb1 = new
E. Compilation fails.
                                                                                                                          12. // insert code here
F. An exception is thrown at runtime.
                                                             StringBuilder("123");
                                                                                                                          13. String[] result = test.split(regex);
                                                             23. String s1 = "123";
                                                                                                                          Which regular expression, inserted at line 12,
Answer: D
                                                                                                                          correctly splits test into "Test A", "Test B", and
                                                             24. // insert code here
13. Click the Exhibit button.
                                                             25. System.out.println(sb1 + " " + s1);
                                                                                                                          "Test
                                                             Which code fragment, inserted at line 24,
<img src='./scjp/13.png'></img><br/>
                                                                                                                          A. String regex = "";
                                                             outputs "123abc 123abc"?
Which statement is true about the classes and
                                                             A. sb1.append("abc"); s1.append("abc");
                                                                                                                          B. String regex = " ";
                                                                                                                          C. String regex = ".*";
interfaces in the exhibit?
                                                             B. sb1.append("abc"); s1.concat("abc");
A. Compilation will succeed for all classes and
                                                             C. sb1.concat("abc"); s1.append("abc");
                                                                                                                          D. String regex = "\\s";
interfaces.
                                                             D. sb1.concat("abc"); s1.concat("abc");
                                                                                                                          E. String regex = "\\.\\s*";
                                                             E. sb1.append("abc"); s1 = s1.concat("abc");
                                                                                                                          F. String regex = "\\w[\.] +"; Ans: E
```

```
21. Given:
                                                            24. Given:
                                                                                                                        27. Given:
5. import java.util.Date;
                                                            3. interface Animal { void makeNoise(); }
                                                                                                                        11. public class ItemTest {
6. import java.text.DateFormat;
                                                            4. class Horse implements Animal {
                                                                                                                        12. private final int id;
                                                                                                                        13. public ItemTest(int id) { this.id = id; }
21. DateFormat df;
                                                            5. Long weight = 1200L;
22. Date date = new Date();
                                                            6. public void makeNoise() {
                                                                                                                        14. public void updateId(int newId) { id =
                                                            System.out.println("whinny"); }
23. // insert code here
                                                                                                                        newld; }
24. String s = df.format(date);
                                                            7. }
                                                                                                                        15.
Which code fragment, inserted at line 23,
                                                            8. public class Icelandic extends Horse {
                                                                                                                        16. public static void main(String[] args) {
allows the code to compile?
                                                            9. public void makeNoise() {
                                                                                                                        17. ItemTest fa = new ItemTest(42);
A. df = new DateFormat();
                                                            System.out.println("vinny"); }
                                                                                                                        18. fa.updateld(69);
B. df = Date.getFormat();
                                                            10. public static void main(String[] args) {
                                                                                                                        19. System.out.println(fa.id);
C. df = date.getFormat();
                                                            11. Icelandic i1 = new Icelandic();
                                                                                                                        20. }
D. df = DateFormat.getFormat();
                                                            12. Icelandic i2 = new Icelandic();
                                                                                                                        21. }
E. df = DateFormat.getInstance();
                                                            13. Icelandic i3 = new Icelandic();
                                                                                                                        What is the result?
                                                            14. i3 = i1; i1 = i2; i2 = null; i3 = i1;
                                                                                                                        A. Compilation fails.
Answer: E
                                                            15.}
                                                                                                                        B. An exception is thrown at runtime.
22. Given a class Repetition:
                                                                                                                        C. The attribute id in the ItemTest object
                                                            When line 15 is reached, how many objects are
                                                                                                                        remains unchanged.
1. package utils;
                                                            eligible for the garbage collector?
                                                                                                                        D. The attribute id in the ItemTest object is
3. public class Repetition {
                                                            A. 0
                                                                                                                        modified to the new value.
4. public static String twice(String s) { return s +
                                                            B. 1
                                                                                                                        E. A new ItemTest object is created with the
                                                                                                                        preferred value in the id attribute.
                                                            C. 2
5. } and given another class Demo: 1. // insert
                                                            D. 3
                                                                                                                        Answer: A
code here
                                                            E. 4
                                                            F. 6
                                                                                                                        28. Given:
3. public class Demo {
                                                                                                                        13. public class Pass {
                                                            Answer: E
4. public static void main(String[] args) {
                                                                                                                        14. public static void main(String [] args) {
System.out.println(twice("pizza"));
                                                            25. Click the Exhibit button.
                                                                                                                        15. int x = 5;
                                                            <br/>
                                                                                                                        16. Pass p = new Pass();
                                                            <img src='./scjp/25.png'></img><br/>
                                                                                                                        17. p.doStuff(x);
                                                                                                                        18. System.out.print(" main x = " + x);
Which code should be inserted at line 1 of
                                                            Given the fully-qualified class names:
Demo.java to compile and run Demo to print
                                                            com.foo.bar.Dog
                                                                                                                        19.}
"pizzapizza"?
                                                            com.foo.bar.blatz.Book com.bar.Car
                                                                                                                        20.
A. import utils.*;
                                                            com.bar.blatz.Sun Which graph represents the
                                                                                                                        21. void doStuff(int x) {
B. static import utils.*;
                                                                                                                        22. System.out.print(" doStuff x = " + x++);
                                                            correct
                                                            directory structure for a JAR file from which
C. import utils.Repetition.*;
                                                                                                                        23.}
D. static import utils.Repetition.*;
                                                            those classes can be used by the compiler and
                                                                                                                        24.}
                                                            JVM?
E. import utils.Repetition.twice();
                                                                                                                        What is the result?
F. import static utils.Repetition.twice;
                                                            A. Jar A
                                                                                                                        A. Compilation fails.
G. static import utils.Repetition.twice;
                                                            B. Jar B
                                                                                                                        B. An exception is thrown at runtime.
Answer: F
                                                            C. Jar C
                                                                                                                        C. doStuff x = 6 main x = 6
                                                            D. Jar D
                                                                                                                        D. doStuff x = 5 main x = 5
23. A UNIX user named Bob wants to replace
                                                            E. Jar E
                                                                                                                        E. doStuff x = 5 main x = 6
his chess program with a new one, but he is
                                                            Answer: A
                                                                                                                        F. doStuff x = 6 main x = 5
                                                                                                                        Answer: D
not sure
                                                            26. Given classes defined in two different files:
where the old one is installed. Bob is currently
able to run a Java chess program starting from
                                                                                                                        29.
                                                            1. package util;
                                                                                                                        Given:
his
                                                            2. public class BitUtils {
home directory /home/bob using the
                                                                                                                        1. public class GC {
command: java -classpath
                                                            3. private static void process(byte[] b) {}
                                                                                                                        2. private Object o;
/test:/home/bob/downloads/*.jar
                                                            4. }
                                                                                                                        3. private void doSomethingElse(Object obj) { o
games.Chess Bob's CLASSPATH is set (at login
                                                            1. package app; 2
                                                            . public class SomeApp {
                                                                                                                        4. public void doSomething() {
/usr/lib:/home/bob/classes:/opt/java/lib:/opt/
                                                            3. public static void main(String[] args) {
                                                                                                                        Object o = new Object();
                                                                                                                        6. doSomethingElse(o);
java/lib/*.jar What is a possible location for
                                                            4. byte[] bytes = new byte[256];
the
                                                            5. // insert code here
                                                                                                                        7. o = new Object();
Chess.class file?
                                                                                                                        8. doSomethingElse(null);
A. /test/Chess.class
                                                                                                                        9. o = null;
                                                            7.}
B. /home/bob/Chess.class
                                                            What is required at line 5 in class SomeApp to
                                                                                                                        10.}
C. /test/games/Chess.class
                                                            use the process method of BitUtils?
                                                                                                                        When the doSomething method is called, after
D. /usr/lib/games/Chess.class
                                                            A. process(bytes);
E. /home/bob/games/Chess.class
                                                            B. BitUtils.process(bytes);
                                                                                                                        which line does the Object created in line 5
F. inside jarfile /opt/java/lib/Games.jar (with a
                                                            C. app.BitUtils.process(bytes);
                                                                                                                        become available for garbage collection?
correct manifest)
                                                            D. util.BitUtils.process(bytes);
                                                                                                                        A. Line 5
                                                            E. import util.BitUtils.*; process(bytes);
G. inside jarfile
                                                                                                                        B. Line 6
/home/bob/downloads/Games.jar (with a
                                                            F. SomeApp cannot use the process method in
                                                                                                                        C. Line 7
correct manifest)
                                                            BitUtils.
                                                                                                                        D. Line 8
                                                                                                                        E. Line 9
Answer: C
                                                            Answer: F
                                                                                                                        F. Line 10
```

Answer: D

```
class Widget extends Gadget{ Sprocket s1;
                                                                                                                       F. f 13
30. Given:
                                                            Spring s2; }
                                                                                                                        G. Compilation fails.
11. public static void test(String str) {
                                                            F. class Gadget { Spring s1; Sprocket s2; }
                                                                                                                        H. An exception is thrown at runtime.
12. int check = 4;
                                                            class Widget extends Gadget{ }
                                                                                                                        Answer: A
13. if (check = str.length()) {
                                                            Answer: A,C
14. System.out.print(str.charAt(check -= 1) +",
                                                                                                                        36. Given:
                                                                                                                        1. class Animal { public String noise() { return
");
                                                            33. A company that makes Computer Assisted
15. } else {
                                                            Design (CAD) software has, within its
                                                                                                                        "peep"; } }
16. System.out.print(str.charAt(0) + ", ");
                                                            application,
                                                                                                                        12. class Dog extends Animal {
17.}
                                                            some utility classes that are used to perform
                                                                                                                        13. public String noise() { return "bark"; }
18. } and the invocation:
                                                           3D rendering tasks. The company's chief
                                                                                                                        14.}
21. test("four");
                                                                                                                        15. class Cat extends Animal {
22. test("tee");
                                                            has just improved the performance of one of
                                                                                                                        16. public String noise() { return "meow"; }
23. test("to");
                                                            the utility classes' key rendering algorithms,
                                                            and has
                                                                                                                        30. Animal animal = new Dog();
What is the result?
A. r, t, t,
                                                            assigned a programmer to replace the old
                                                                                                                        31. Cat cat = (Cat)animal;
                                                            algorithm with the new algorithm. When the
                                                                                                                        32. System.out.println(cat.noise());
B. r, e, o,
C. Compilation fails.
                                                            programmer begins researching the utility
                                                                                                                        What is the result?
D. An exception is thrown at runtime.
                                                            classes, she is happy to discover that the
                                                                                                                       A. peep
                                                            algorithm to
                                                                                                                        B. bark
                                                            be replaced exists in only one class. The
                                                                                                                        C. meow
31. Given:
                                                            programmer reviews that class's API, and
                                                                                                                        D. Compilation fails.
1. interface A { public void aMethod(); }
                                                            replaces the
                                                                                                                        E. An exception is thrown at runtime.
2. interface B { public void bMethod(); }
                                                            old algorithm with the new algorithm, being
                                                                                                                        Answer: E
3. interface C extends A,B { public void
                                                            careful that her changes adhere strictly to the
cMethod(); }
                                                                                                                        37. Given:
4. class D implements B {
                                                            API. Once testing has begun, the programmer
                                                                                                                        1. class Super {
5. public void bMethod(){}
                                                            discovers that other classes that use the class
                                                                                                                        2. private int a;
6. }
                                                                                                                        3. protected Super(int a) { this.a = a; }
7. class E extends D implements C {
                                                            changed are no longer working properly. What
                                                                                                                        4. } ...
8. public void aMethod(){}
                                                            design flaw is most likely the cause of these
                                                                                                                        11. class Sub extends Super {
9. public void bMethod(){}
                                                                                                                        12. public Sub(int a) { super(a); }
                                                            new
10. public void cMethod(){}
                                                            bugs?
                                                                                                                        13. public Sub() { this.a = 5; }
                                                            A. Inheritance
11.}
                                                                                                                        14. }
                                                            B. Tight coupling
What is the result?
                                                                                                                        Which two, independently, will allow Sub to
A. Compilation fails because of an error in line
                                                            C. Low cohesion
                                                                                                                        compile? (Choose two.)
3.
                                                            D. High cohesion
                                                                                                                        A. Change line 2 to:
                                                            E. Loose coupling
B. Compilation fails because of an error in line
                                                                                                                        public int a;
                                                            F. Object immutability
                                                                                                                        B. Change line 2 to:
7.
C. Compilation fails because of an error in line
                                                            Answer: B
                                                                                                                        protected int a;
                                                                                                                        C. Change line 13 to:
D. If you define De = new E(), then
                                                            34. Which Man class properly represents the
                                                                                                                        public Sub() { this(5); }
e.bMethod() invokes the version of bMethod()
                                                            relationship "Man has a best friend who is a
                                                                                                                        D. Change line 13 to:
defined in Line
                                                            Dog"?
                                                                                                                        public Sub() { super(5); }
                                                           A. class Man extends Dog { }
                                                                                                                        E. Change line 13 to:
E. If you define D = (D)(new E()), then
                                                                                                                        public Sub() { super(a); }
                                                           B. class Man implements Dog { }
e.bMethod() invokes the version of bMethod()
                                                            C. class Man { private BestFriend dog; }
                                                                                                                        Answer: C,D
defined in
                                                            D. class Man { private Dog bestFriend; }
                                                            E. class Man { private Dog<bestFriend>; }
                                                                                                                        38. Given:
F. If you define D e = (D)(new E()), then
                                                            F. class Man { private BestFriend<dog>; }
                                                                                                                        1. public class Base {
                                                                                                                        public static final String FOO = "foo";
e.bMethod() invokes the version of bMethod()
                                                           Answer: D
defined in
                                                                                                                        3. public static void main(String[] args) {
Line 9.
                                                            35. Given:
                                                                                                                        4. Base b = new Base();
Answer: F
                                                            31. class Foo {
                                                                                                                        5. Sub s = new Sub();
                                                            32. public int a = 3;
                                                                                                                       System.out.print(Base.FOO);
32. Given that: Gadget has-a Sprocket and
                                                            33. public void addFive() { a += 5;
                                                                                                                        7. System.out.print(Sub.FOO);
Gadget has-a Spring and Gadget is-a Widget
                                                            System.out.print("f"); }
                                                                                                                        8. System.out.print(b.FOO);
and Widget
                                                            34. }
                                                                                                                        9. System.out.print(s.FOO);
has-a Sprocket Which two code fragments
                                                            35. class Bar extends Foo {
                                                                                                                        10. System.out.print(((Base)s).FOO);
represent these relationships? (Choose two.)
                                                            36. public int a = 8;
                                                            37. public void addFive() { this.a += 5;
                                                                                                                        12. class Sub extends Base {public static final
A. class Widget { Sprocket s; }
                                                            System.out.print("b "); }
                                                                                                                        String FOO="bar";}
class Gadget extends Widget { Spring s; }
                                                            38. } Invoked with: Foo f = new Bar();
                                                                                                                        What is the result?
B. class Widget { }
class Gadget extends Widget { Spring s1;
                                                            f.addFive(); System.out.println(f.a);
                                                                                                                        A. foofoofoofoo
Sprocket s2: }
                                                            What is the result?
                                                                                                                        B. foobarfoobarbar
C. class Widget { Sprocket s1; Spring s2; }
                                                            A. b 3
                                                                                                                        C. foobarfoofoofoo
class Gadget extends Widget { }
                                                            B. b 8
                                                                                                                        D. foobarfoobarfoo
D. class Gadget { Spring s; }
                                                            C. b 13
                                                                                                                        E. barbarbarbar
class Widget extends Gadget{ Sprocket s; }
                                                            D. f 3
                                                                                                                        F. foofoofoobarbar Ans: D
E. class Gadget { }
                                                            E. f 8
```

```
39. Given:
                                                             21. catch (IOException e) {
                                                                                                                          17. } else {
1. package geometry;
                                                             System.out.println("Exception"); }
                                                                                                                          18. System.out.println("some");
2. public class Hypotenuse {
                                                             What is the result?
                                                                                                                          20.}
public InnerTriangle it = new InnerTriangle();
4. class InnerTriangle {
                                                             A. Exception
                                                                                                                          What is the result?
                                                             B. A,B,Exception
5. public int base;
                                                                                                                          A. null
6. public int height;
                                                             C. Compilation fails because of an error in line
                                                                                                                          B. zero
                                                                                                                          C. some
7. }
8.}
                                                             D. Compilation fails because of an error in line
                                                                                                                          D. Compilation fails.
Which statement is true about the class of an
                                                                                                                          E. An exception is thrown at runtime.
object that can reference the variable base?
                                                             E. A NullPointerException is thrown at runtime.
                                                                                                                          Answer: D
A. It can be any class.
                                                             Answer: D
B. No class has access to base.
                                                                                                                          46.
C. The class must belong to the geometry
                                                             43
                                                                                                                          Given:
                                                             Given:
                                                                                                                          11. public class Test {
package.
D. The class must be a subclass of the class
                                                             11. public void go(int x) {
                                                                                                                          12. public static void main(String [] args) {
Hypotenuse.
                                                             12. assert (x > 0);
                                                                                                                          13. int x = 5;
Answer: C
                                                             13. switch(x) {
                                                                                                                          14. boolean b1 = true;
                                                             14. case 2:;
                                                                                                                          15. boolean b2 = false;
40. Given:
                                                             15. default: assert false;
                                                                                                                          16.
2. public class Hi {
                                                             16. }
                                                                                                                          17. if ((x == 4) \&\& !b2)
                                                             17.}
                                                                                                                          18. System.out.print("1");
3. void m1() { }
4. protected void() m2 { }
                                                             18. private void go2(int x) { assert (x < 0); }
                                                                                                                          19. System.out.print("2");
                                                                                                                          20. if ((b2 = true) && b1)
5.}
                                                             Which statement is true?
                                                                                                                          21. System.out.print("3");
6. class Lois extends Hi {
                                                             A. All of the assert statements are used
7. // insert code here
                                                             appropriately.
                                                                                                                          22.}
                                                             B. Only the assert statement on line 12 is used
                                                                                                                          23.}
8.}
Which four code fragments, inserted
                                                             appropriately.
                                                                                                                          What is the result?
                                                             C. Only the assert statement on line 15 is used
independently at line 7, will compile? (Choose
                                                                                                                          A. 2
                                                             appropriately.
                                                                                                                          B. 3
                                                             D. Only the assert statement on line 18 is used
A. public void m1() { }
                                                                                                                          C. 12
B. protected void m1() { }
                                                                                                                          D. 23
                                                             appropriately.
C. private void m1() { }
                                                             E. Only the assert statements on lines 12 and
                                                                                                                          E. 123
                                                                                                                          F. Compilation fails.
D. void m2() { }
                                                             15 are used appropriately.
E. public void m2() { }
                                                             F. Only the assert statements on lines 12 and
                                                                                                                          G. An exception is thrown at runtime.
F. protected void m2() { }
                                                                                                                          Answer: D
                                                             18 are used appropriately.
G. private void m2() { }
                                                             G. Only the assert statements on lines 15 and
Answer: A,B,E,F
                                                                                                                          47.
                                                             18 are used appropriately.
                                                             Answer: G
                                                                                                                          Given:
41. Which two code fragments are most likely
                                                                                                                          11. static void test() throws Error {
to cause a StackOverflowError? (Choose two.)
                                                             44. Given:
                                                                                                                          12. if (true) throw new AssertionError();
A. int []x = \{1,2,3,4,5\};
                                                             1. public class Breaker2 {
                                                                                                                          13. System.out.print("test");
for(int y = 0; y < 6; y++)
                                                             2. static String o = "";
                                                                                                                          14.}
System.out.println(x[y]);
                                                             3. public static void main(String[] args) {
                                                                                                                          15. public static void main(String[] args) {
B. static int[] x = \{7,6,5,4\};
                                                                                                                          16. try { test(); }
                                                             5. for(int x = 2; x < 7; x++) {
static \{x[1] = 8;
                                                                                                                          17. catch (Exception ex) {
x[4] = 3; 
                                                             6. if(x==3) continue;
                                                                                                                          System.out.print("exception "); }
C. for(int y = 10; y < 10; y++)
                                                             7. if(x==5) break z;
                                                                                                                          18. System.out.print("end");
doStuff(y);
                                                             8. o = o + x;
                                                                                                                          19.}
D. void doOne(int x) { doTwo(x); }
                                                             9. }
                                                                                                                          What is the result?
void doTwo(int y) { doThree(y); }
                                                             10. System.out.println(o);
                                                                                                                          A. end
void doThree(int z) { doTwo(z): }
                                                                                                                          B. Compilation fails.
                                                             11. }
E. for(int x = 0; x < 1000000000; x++)
                                                                                                                          C. exception end
                                                             12.}
                                                             What is the result?
                                                                                                                          D. exception test end
doStuff(x);
F. void counter(int i) { counter(++i); }
                                                             A. 2
                                                                                                                          E. A Throwable is thrown by main.
Answer: D,F
                                                             B. 24
                                                                                                                          F. An Exception is thrown by main.
                                                             C. 234
                                                                                                                          Answer: E
42. Given:
                                                             D. 246
                                                             E. 2346
                                                                                                                          48.
11. class A {
12. public void process() {
                                                             F. Compilation fails.
                                                                                                                          Given:
                                                                                                                          10. public class Foo {
System.out.print("A,"); }
                                                             Answer: B
13. class B extends A {
                                                                                                                          11. static int[] a;
14. public void process() throws IOException {
                                                                                                                          12. static { a[0]=2; }
                                                             45.
                                                                                                                          13. public static void main( String[] args ) {}
15. super.process();
                                                             Given:
                                                             11. public static void main(String[] args) {
16. System.out.print("B,");
                                                                                                                          14.}
17. throw new IOException();
                                                             12. String str = "null";
                                                                                                                          Which exception or error will be thrown when
                                                             13. if (str == null) {
                                                                                                                          a programmer attempts to run this code?
19. public static void main(String[] args) {
                                                             14. System.out.println("null");
                                                                                                                          A. java.lang.StackOverflowError
20. try { new B().process(); }
                                                             15. } else (str.length() == 0) {
                                                                                                                          B. java.lang.lllegalStateException
                                                             16. System.out.println("zero");
                                                                                                                          C. java.lang.ExceptionInInitializerError
```

D. java.lang.ArrayIndexOutOfBoundsException	52.Given:	10. public void run() {
Answer: C	1. public class Threads5 {	11. foo();
	2. public static void main (String[] args) {	12. System.out.print(x + ", ");
49.	3. new Thread(new Runnable() {	13. } }.start();
Click the Exhibit button.	4. public void run() {	14. } }
 	System.out.print("bar");	Which two changes, taken together, would
 	6. }}).start();	guarantee the output: 1, 2, 3, 4, 5, ? (Choose
Given:	7. }	two.)
25. try {	8. }	A. move the line 12 print statement into the
26. A a = new A();	What is the result?	foo() method
27. a.method1();	A. Compilation fails.	B. change line 7 to public synchronized void
28. } catch (Exception e) {	B. An exception is thrown at runtime.	go() {
<pre>29. System.out.print("an error occurred"); 30. }</pre>	C. The code executes normally and prints "bar".	C. change the variable declaration on line 2 to
Which two statements are true if a	D. The code executes normally, but nothing	private volatile int x; D. wrap the code inside the foo() method with
NullPointerException is thrown on line 3 of	prints.	a synchronized(this) block
class C? (Choose	Answer: C	E. wrap the for loop code inside the go()
two.)	Allower. C	method with a synchronized block
ActualTests.com	53. Given:	synchronized(this) { //
A. The application will crash.	public class TestOne implements Runnable {	for loop code here }
B. The code on line 29 will be executed.	2. public static void main (String[] args) throws	Answer: A,D
C. The code on line 5 of class A will execute.	Exception {	
D. The code on line 5 of class B will execute.	Thread t = new Thread(new TestOne());	56.
E. The exception will be propagated back to	4. t.start();	Given:
line 27.	System.out.print("Started");	1. public class Threads2 implements Runnable {
Answer: B,E	6. t.join();	 br/>
	7. System.out.print("Complete");	2.
50.	8. }	3. public void run() {
Given:	9. public void run() {	4. System.out.println("run.");
11. public static void main(String[] args) {	10. for (int i = 0; i < 4; i++) {	throw new RuntimeException("Problem");
12. for (int i = 0; i <= 10; i++) {	11. System.out.print(i);	 <
13. if (i > 6) break;	12.}	6. } < br/>
14. }	13. }	7. public static void main(String[] args) {
15. System.out.println(i);	14. } What can be a result?	8. Thread t = new Thread(new Threads2());
16. } What is the result?	A. Compilation fails.	9. t.start();
A. 6	B. An exception is thrown at runtime.	10. System.out.println("End of method.");
B. 7	C. The code executes and prints	<pre> <br <="" td=""/></pre>
C. 10	"StartedComplete".	11. }
D. 11	D. The code executes and prints	12. }
E. Compilation fails.	"StartedComplete0123".	Which two can be results? (Choose two.)
F. An exception is thrown at runtime.	E. The code executes and prints	A. java.lang.RuntimeException: Problem
Answer: E	"Started0123Complete".	B. run.
	Answer: E	java.lang.RuntimeException: Problem
51.		C. End of method.
Given:	54. Click the Exhibit button.	java.lang.RuntimeException: Problem
11. static class A {	 	D. End of method.
12. void process() throws Exception { throw	 	run.
new Exception(); }	What is the output if the main() method is	java.lang.RuntimeException: Problem
13.}	run?	E. run.
14. static class B extends A {	A. 4	java.lang.RuntimeException: Problem
15. void process() { System.out.println("B"); }	B. 5	End of method.
16. }	C. 8 D. 9	Answer: D,E
17. public static void main(String[] args) { 18. new B().process();	E. Compilation fails.	57. DRAG DROP
19. }	F. An exception is thrown at runtime.	<pre> <</pre>
What is the result?	G. It is impossible to determine for certain.	<pre> </pre>
A. B	Answer: D	Click the Task button.
B. The code runs with no output.	Allower. D	Answer:
C. Compilation fails because of an error in line	55.	Allower.
12.	Given:	58. DRAG DROP
D. Compilation fails because of an error in line	1. public class TestFive {	
15.	2. private int x;	<pre> </pre>
E. Compilation fails because of an error in line	3. public void foo() {	Click the Task button.
18.	4. int current = x;	Answer:
Answer: A	5. x = current + 1;	
	6. }	59. DRAG DROP
	7. public void go() {	Click the Task button.
	8. for(int i = 0; i < 5; i++) {	
	9. new Thread() {	

60. DRAG DROP 1. import java.io.*; E. Thread.notify(); Click the Task button. 2. public class Maker { Answer: C,D 3. public static void main(String[] args) { 68.
 4. File dir = new File("dir"); 5. File f = new File(dir, "f"); Given: Answer: 1. public class Threads3 implements Runnable { 6.} 7.} 2. public void run() { Which statement is true? 61. Given: 3. System.out.print("running"); 1. public class TestString1 { A. Compilation fails. 4.} 2. public static void main(String[] args) { B. Nothing is added to the file system. 5. public static void main(String[] args) { 3. String str = "420"; C. Only a new file is created on the file system. 6. Thread t = new Thread(new Threads3()); 4. str += 42; D. Only a new directory is created on the file 7. t.run(); System.out.print(str); 8. t.run(); 6.} E. Both a new file and a new directory are 9. t.start(); created on the file system. 10.} 7.} What is the output? Answer: B 11.} A. 42 What is the result? B. 420 65. A. Compilation fails. C. 462 Given: B. An exception is thrown at runtime. D. 42042 12. String csv = "Sue,5,true,3"; C. The code executes and prints "running". E. Compilation fails. 13. Scanner scanner = new Scanner(csv); D. The code executes and prints F. An exception is thrown at runtime. 14. scanner.useDelimiter(","); "runningrunning". Answer: D 15. int age = scanner.nextInt(); E. The code executes and prints What is the result? "runningrunningrunning". 62. A. Compilation fails. Answer: E Given: B. After line 15, the value of age is 5. 12. Date date = new Date(); C. After line 15, the value of age is 3. 69. 13. df.setLocale(Locale.ITALY); D. An exception is thrown at runtime. Given: 14. String s = df.format(date); Answer: D 1. public class Threads5 { The variable df is an object of type DateFormat 2. public static void main (String[] args) { 66. Given that t1 is a reference to a live thread, that has been initialized in line 11. What is the 3. new Thread(new Runnable() { result if this code is run on December 14, which is true? 4. public void run() { 2000? A. The Thread.sleep() method can take t1 as an System.out.print("bar"); A. The value of s is 14-dic-2000. argument. 6. }}).start(); B. The value of s isDec 14, 2000. B. The Object.notify() method can take t1 as an 7.} C. An exception is thrown at runtime. argument. 8.} D. Compilation fails because of an error in line C. The Thread.yield() method can take t1 as an What is the result? 13. argument. A. Compilation fails. Answer: D D. The Thread.setPriority() method can take t1 B. An exception is thrown at runtime. C. The code executes normally and prints as an argument. 63. E. The Object.notify() method arbitrarily "bar". chooses which thread to notify. Given: D. The code executes normally, but nothing 1. public class KungFu { Answer: E 2. public static void main(String[] args) { Answer: C 3. Integer x = 400; 4. Integer y = x; Given that Triangle implements Runnable, and: 70. Given: 5. x++; 31. void go() throws Exception { 11. public class PingPong implements Runnable 6. StringBuilder sb1 = new 32. Thread t = new Thread(new Triangle()); 12. synchronized void hit(long n) { StringBuilder("123"); 33. t.start(); 7. StringBuilder sb2 = sb1; 34. for(int x = 1; x < 100000; x++) { 13. for(int i = 1; i < 3; i++) 14. System.out.print(n + "-" + i + " "); 8. sb1.append("5"); 35. //insert code here 15.} 9. System.out.println((x==y) + " 36. if(x%100 == 0) System.out.print("g"); (sb1==sb2)); 16. public static void main(String[] args) { 37. } } 10.} 38. public void run() { 17. new Thread(new PingPong()).start(); 18. new Thread(new PingPong()).start(); 11.} 39. try { What is the result? 40. for(int x = 1; x < 100000; x++) { 19.} A. true true 41. // insert the same code here 20. public void run() { 42. if(x%100 == 0) System.out.print("t"); 21. hit(Thread.currentThread().getId()); B. false true C. true false 22.} D. false false 44. } catch (Exception e) { } Which two statements are true? (Choose two.) E. Compilation fails. 45. } F. An exception is thrown at runtime. A. The output could be 8-1 7-2 8-2 7-1 Which two statements, inserted independently at both lines 35 and 41, tend to allow both Answer: B B. The output could be 7-1 7-2 8-1 6-1 C. The output could be 8-1 7-1 7-2 8-2 64. to temporarily pause and allow the other D. The output could be 8-1 8-2 7-1 7-2 Given that the current directory is empty, and thread to execute? (Choose two.) that the user has read and write privileges to A. Thread.wait(); Answer: C,D B. Thread.join(); current directory, and the following: C. Thread.yield();

D. Thread.sleep(1);

```
71. Given:
                                                            74. Given:
                                                                                                                        Answer: A,C,E,F,G
10. interface A { void x(); }
                                                            1. class ClassA {
11. class B implements A { public void x() {}
                                                            2. public int numberOfInstances;
                                                                                                                        77.
                                                            3. protected ClassA(int numberOfInstances) {
                                                                                                                        Given:
public void y() {} }
12. class C extends B { public void x() {} } And:
                                                            4. this.numberOfInstances =
                                                                                                                        1. class Pizza { <br/>
20. java.util.List<A> list = new
                                                            numberOfInstances;
                                                                                                                        2. java.util.ArrayList toppings; <br/>
java.util.ArrayList<A>();
                                                            5.}
                                                                                                                        3. public final void addTopping(String topping)
21. list.add(new B());
                                                            6.}
                                                                                                                        { <br/>
                                                            7. public class ExtendedA extends ClassA {
22. list.add(new C());
                                                                                                                        4. toppings.add(topping); <br/>
23. for (A a : list) {
                                                            8. private ExtendedA(int numberOfInstances) {
                                                                                                                        5. } <br/>
24. a.x();
                                                            9. super(numberOfInstances);
                                                                                                                        6. } <br/>
25. a.y();
                                                                                                                        7. public class PepperoniPizza extends Pizza {
26.}
                                                            11. public static void main(String[] args) {
                                                                                                                        <br/>
What is the result?
                                                            12. ExtendedA ext = new ExtendedA(420);
                                                                                                                        8. public void addTopping(String topping) {
                                                            System.out.print(ext.numberOfInstances);
A. The code runs with no output.
B. An exception is thrown at runtime.
                                                                                                                        9. System.out.println("Cannot add Toppings");
C. Compilation fails because of an error in line
                                                            Which statement is true?
                                                                                                                        10. } <br/>
D. Compilation fails because of an error in line
                                                            A. 420 is the output.
                                                                                                                        11. public static void main(String[] args) { <br/>
                                                            B. An exception is thrown at runtime.
                                                                                                                        12. Pizza pizza = new PepperoniPizza(); <br/>
E. Compilation fails because of an error in line
                                                            C. All constructors must be declared public.
                                                                                                                        13. pizza.addTopping("Mushrooms"); <br/>
                                                            D. Constructors CANNOT use the private
                                                                                                                        14. } <br/>
F. Compilation fails because of an error in line
                                                                                                                        15. } <br/>
                                                            E. Constructors CANNOT use the protected
                                                                                                                        <img src='./scjp/77.png'/><br/>
25.
Answer: F
                                                                                                                        What is the result? <br/>
                                                            modifier.
                                                                                                                        A. Compilation fails.
                                                            Answer: A
72. Given:
                                                                                                                        B. Cannot add Toppings
11. class Mammal { }
                                                            75
                                                                                                                        C. The code runs with no output.
                                                            Given:
                                                                                                                        D. A NullPointerException is thrown in Line 4.
13. class Raccoon extends Mammal {
                                                            1. public class Target {
                                                                                                                        Answer: A
14. Mammal m = new Mammal();
                                                            2. private int i = 0;
                                                            3. public int addOne(){
                                                                                                                        78.
15.}
16.
                                                            4. return ++i;
                                                                                                                        Given:
17. class BabyRaccoon extends Mammal { }
                                                                                                                        11. class ClassA {}
                                                            5. }
Which four statements are true? (Choose
                                                            6. } And:
                                                                                                                        12. class ClassB extends ClassA {}
                                                            1. public class Client {
                                                                                                                        13. class ClassC extends ClassA {} and:
A. Raccoon is-a Mammal.
                                                            2. public static void main(String[] args){
                                                                                                                        21. ClassA p0 = new ClassA();
                                                                                                                        22. ClassB p1 = new ClassB();
B. Raccoon has-a Mammal.
                                                            3. System.out.println(new Target().addOne());
C. BabyRaccoon is-a Mammal.
                                                                                                                        23. ClassC p2 = new ClassC();
                                                            4.}
D. BabyRaccoon is-a Raccoon.
                                                            5.}
                                                                                                                        24. ClassA p3 = new ClassB();
E. BabyRaccoon has-a Mammal.
                                                            Which change can you make to Target without
                                                                                                                        25. ClassA p4 = new ClassC();
F. BabyRaccoon is-a BabyRaccoon.
                                                            affecting Client?
                                                                                                                        Which three are valid? (Choose three.)
Answer: A,B,C,F
                                                            A. Line 4 of class Target can be changed to
                                                                                                                        A. p0 = p1;
                                                            return i++;
                                                                                                                        B. p1 = p2;
73. Given:
                                                            B. Line 2 of class Target can be changed to
                                                                                                                        C. p2 = p4;
10: public class Hello {
                                                                                                                        D. p2 = (ClassC)p1;
                                                            private int i = 1;
11: String title;
                                                            C. Line 3 of class Target can be changed to
                                                                                                                        E. p1 = (ClassB)p3;
12: int value;
                                                            private int addOne(){
                                                                                                                        F. p2 = (ClassC)p4;
13: public Hello() {
                                                            D. Line 2 of class Target can be changed to
                                                                                                                        Answer: A,E,F
14: title += " World";
                                                            private Integer i = 0;
                                                            Answer: D
                                                                                                                        79. Given two files, GrizzlyBear.java and
16: public Hello(int value) {
                                                                                                                        Salmon.iava:
17: this.value = value;
                                                            76.
                                                                                                                        1. package animals.mammals;
18: title = "Hello";
                                                            Given:
19: Hello();
                                                            1. public class Blip {
                                                                                                                        3. public class GrizzlyBear extends Bear {
20: }
                                                            protected int blipvert(int x) { return 0; }
                                                                                                                        4. void hunt() {
21: } and:
                                                                                                                        Salmon s = findSalmon();
                                                            4. class Vert extends Blip {
30: Hello c = new Hello(5);
                                                                                                                        s.consume();
31: System.out.println(c.title);
                                                            5. // insert code here
                                                                                                                        7.}
What is the result?
                                                                                                                        8.}
                                                            Which five methods, inserted independently at
                                                                                                                        1. package animals.fish;
A. Hello
                                                            line 5, will compile? (Choose five.)
B. Hello World
C. Compilation fails.
                                                            A. public int blipvert(int x) { return 0; }
                                                                                                                        3. public class Salmon extends Fish {
                                                                                                                        4. public void consume() { /* do stuff */ }
D. Hello World 5
                                                            B. private int blipvert(int x) { return 0; }
E. The code runs with no output.
                                                            C. private int blipvert(long x) { return 0; }
F. An exception is thrown at runtime.
                                                            D. protected long blipvert(int x) { return 0; }
                                                                                                                        If both classes are in the correct directories for
Answer: C
                                                            E. protected int blipvert(long x) { return 0; }
                                                                                                                        their packages, and the Mammal class
                                                            F. protected long blipvert(long x) { return 0; }
                                                                                                                        correctly
                                                            G. protected long blipvert(int x, int y) { return
                                                                                                                        defines the findSalmon() method, which
                                                                                                                        change allows this code to compile?
```

D. The JAR file is located at /foo/myLib.jar and 12.} A. add import animals.mammals.*; at line2 in a classpath environment variable is set that 13.} Salmon.java includes /foo/myLib.jar. What is the result? B. add import animals.fish.*; at line2 in E. The JAR file is located at /foo/myLib.jar and A. 1 the Book class is compiled using javac -cp GrizzlyBear.java B. 2 C. add import animals.fish.Salmon.*; at line2 in /foo/myLib.jar/Paper Book.java. C. 12 GrizzlyBear.java F. The JAR file is located at /foo/myLib.jar and D. Compilation fails. D. add import animals.mammals.GrizzlyBear.*; the Book class is compiled using javac -d E. No output is produced. at line2 in Salmon.java /foo/myLib.jar Book.java F. An exception is thrown at runtime. Answer: B G. The JAR file is located at /foo/myLib.jar and Answer: E the Book class is compiled using javac -80. Given: classpath 86. Given: 1. package com.company.application; /foo/myLib.jar Book.java 1. public class GC { Answer: B,D,G 2. private Object o; 3. private void doSomethingElse(Object obj) { o 3. public class MainClass { 4. public static void main(String[] args) {} 83. Given: = obj; } 11. interface DeclareStuff { 4. public void doSomething() { And MainClass exists in the 12. public static final int EASY = 3; Object o = new Object(); 6. doSomethingElse(o); /apps/com/company/application directory. 13. void doStuff(int t); } Assume the CLASSPATH 14. public class TestDeclare implements 7. o = new Object(); environment variable is set to "." (current 8. doSomethingElse(null); DeclareStuff { directory). Which two java commands entered 15. public static void main(String [] args) { 9. o = null; 16. int x = 5; 10.} 17. new TestDeclare().doStuff(++x); 11.} command line will run MainClass? (Choose When the doSomething method is called, after 18. } two.) A. java MainClass if run from the /apps 19. void doStuff(int s) { which line does the Object created in line 5 directory 20. s += EASY + ++s; become available for garbage collection? B. java com.company.application.MainClass if 21. System.out.println("s " + s); A. Line 5 run from the /apps directory 22. } B. Line 6 C. java -classpath /apps 23. } C. Line 7 What is the result? com.company.application.MainClass if run D. Line 8 from any directory A. s 14 E. Line 9 D. java -classpath . MainClass if run from the B. s 16 F. Line 10 /apps/com/company/application directory C. s 10 Answer: D D. Compilation fails. E. java -classpath /apps/com/company/application:. MainClass if E. An exception is thrown at runtime. 87. Click the Exhibit button. What is the result? run from the /apps directory Answer: D F. java com.company.application.MainClass if
 run from the /apps/com/company/application 84. Given: A. go in Goban directory 11. public class Commander { go in Sente 12. public static void main(String[] args) { Answer: B,C B. go in Sente 13. String myProp = /* insert code here */ go in Goban 81. Click the Exhibit button. Which three code 14. System.out.println(myProp); C. go in Sente fragments, added individually at line 29, go in Goban D. go in Goban produce the 16.} output 100? (Choose three.) and the command line: java go in Sente
 Dprop.custom=gobstopper Commander Which E. Compilation fails because of an error in line
 two, placed on line 17. 13, will produce the output gobstopper? A. n = 100; Answer: C B. i.setX(100); (Choose two.) C. o.getY().setX(100); A. System.load("prop.custom"); 88. D. i = new Inner(); i.setX(100); B. System.getenv("prop.custom"); Given: E. o.setY(i); i = new Inner(); i.setX(100); C. System.property("prop.custom"); 1. public class Plant { F. i = new Inner(); i.setX(100); o.setY(i); D. System.getProperty("prop.custom"); 2. private String name; Answer: B,C,F 3. public Plant(String name) { this.name = System.getProperties().getProperty("prop.cust 82. A developer is creating a class Book, that 4. public String getName() { return name; } needs to access class Paper. The Paper class is Answer: D,E deployed in a JAR named myLib.jar. Which 1. public class Tree extends Plant { three, taken independently, will allow the 85. Given: 2. public void growFruit() { } 3. public class Spock { 3. public void dropLeaves() { } developer to use the Paper class while compiling the Book 4. public static void main(String[] args) { 4.} Long tail = 2000L; Which statement is true? class? (Choose three.) A. The JAR file is located at 6. Long distance = 1999L; A. The code will compile without changes. \$JAVA_HOME/jre/classes/myLib.jar. B. The code will compile if public Tree() { 7. Long story = 1000L; B. The JAR file is located at 8. if((tail > distance) ^ ((story * 2) == tail)) Plant(); } is added to the Tree class. 9. System.out.print("1"); \$JAVA_HOME/jre/lib/ext/myLib.jar.. C. The code will compile if public Plant() { C. The JAR file is located at /foo/myLib.jar and 10. if((distance + 1 != tail) ^ ((story * 2) == Tree(); } is added to the Plant class.

distance))

11. System.out.print("2");

D. The code will compile if public Plant() {

this("fern"); } is added to the Plant class.

a classpath environment variable is set that

includes /foo/myLib.jar/Paper.class.

E. The code will compile if public Plant() {	3. public static void main(String[] args) {	D. Compilation fails because of an error in line
Plant("fern"); } is added to the Plant class. Answer: D	 System.out.println(new TestA() { public String toString() { return "test"; } 	18. Answer: D
Allower. D	6. });	Allswell B
89.	7.}	96.
Click the Exhibit button.	8. }	Given:
Given:	What is the result?	3. import java.util.*;
25. A a = new A();	A. test	4. public class Mapit {
26. System.out.println(a.doit(4, 5)); What is the result?	B. null	 public static void main(String[] args) { Set<integer> set = new HashSet<integer>();</integer></integer>
A. Line 26 prints "a" to System.out.	C. An exception is thrown at runtime. D. Compilation fails because of an error in line	7. Integer i1 = 45;
B. Line 26 prints "b" to System.out.	1.	8. Integer i2 = 46;
C. An exception is thrown at line 26 at runtime.	E. Compilation fails because of an error in line	9. set.add(i1);
D. Compilation of class A will fail due to an	4.	10. set.add(i1);
error in line 6.	F. Compilation fails because of an error in line	11. set.add(i2); System.out.print(set.size() + "
Answer: A	5.	");
00	Answer: A	12. set.remove(i1); System.out.print(set.size()
90. Given:	93. Given:	+ " "); 13. i2 = 47;
11. public enum Title {	11. class Alpha {	14. set.remove(i2); System.out.print(set.size()
12. MR("Mr."), MRS("Mrs."), MS("Ms.");	12. public void foo() { System.out.print("Afoo	+ " ");
13. private final String title;	"); }	15. }
14. private Title(String t) { title = t; }	13.}	16. }
15. public String format(String last, String first)	14. public class Beta extends Alpha {	What is the result?
{	15. public void foo() { System.out.print("Bfoo	A. 2 1 0
16. return title + " " + first + " " + last;	"); }	B. 2 1 1
17. }	16. public static void main(String[] args) {	C. 321
<pre>18. } 19. public static void main(String[] args) {</pre>	17. Alpha a = new Beta(); 18. Beta b = (Beta)a;	D. 3 2 2 E. Compilation fails.
20. System.out.println(Title.MR.format("Doe",	18. Beta b = (Beta)a; 19. a.foo();	F. An exception is thrown at runtime.
"John"));	20. b.foo();	Answer: B
21. }	21. }	, monen b
What is the result?	22.}	97. Given:
A. Mr. John Doe	What is the result?	1. public class Score implements
B. An exception is thrown at runtime.	A. Afoo Afoo	Comparable <score> {</score>
C. Compilation fails because of an error in line	B. Afoo Bfoo	private int wins, losses;
12.	C. Bfoo Afoo	3. public Score(int w, int l) { wins = w; losses = l;
D. Compilation fails because of an error in line	D. Bfoo Bfoo	}
15.	E. Compilation fails.	4. public int getWins() { return wins; }
E. Compilation fails because of an error in line 20.	F. An exception is thrown at runtime. Answer: D	5. public int getLosses() { return losses; }6. public String toString() {
Answer: A	Allswer	7. return "<" + wins + "," + losses + ">";
	94. Given:	8. }
91.	10. abstract public class Employee {	9. // insert code here
Given:	11. protected abstract double	10. }
11. public interface A111 {	getSalesAmount();	Which method will complete this class?
12. String s = "yo";	12. public double getCommision() {	A. public int compareTo(Object o){/*more
13. public void method1();	13. return getSalesAmount() * 0.15;	code here*/}
14. } 17. interface B { }	14. } 15. }	B. public int compareTo(Score other){/*more code here*/}
20. interface C extends A111, B {	16. class Sales extends Employee {	C. public int compare(Score s1,Score
21. public void method1();	17. // insert method here	s2){/*more code here*/}
22. public void method1(int x);	18. }	D. public int compare(Object o1,Object
23. }	Which two methods, inserted independently at	o2){/*more code here*/}
What is the result?	line 17, correctly complete the Sales class?	Answer: B
A. Compilation succeeds.	(Choose two.)	
B. Compilation fails due to multiple errors.	A. double getSalesAmount() { return 1230.45; }	
C. Compilation fails due to an error only on line	B. public double getSalesAmount() { return	98. A programmer has an algorithm that
20. D. Compilation fails due to an error only on line	1230.45; } C. private double getSalesAmount() { return	requires a java.util.List that provides an efficient
D. Compilation fails due to an error only on line 21.	1230.45; }	implementation of add(0, object), but does
E. Compilation fails due to an error only on line	D. protected double getSalesAmount() { return	NOT need to support quick random access.
22.	1230.45; }	What
F. Compilation fails due to an error only on line	Answer: B,D	supports these requirements?
12.		A. java.util.Queue
Answer: A	95. Click the Exhibit button. What is the result?	B. java.util.ArrayList
02. 61	A. 4321	C. java.util.LinearList
92. Given:	B. 0000	D. java.util.LinkedList
 interface TestA { String toString(); } public class Test { 	C. An exception is thrown at runtime.	Answer: D
p (

```
99. Given:
                                                            F. [606, 608, 609, 610, 612] [608, 609, 610]
                                                                                                                         13. args = null;
12. import java.util.*;
                                                            Answer: F
                                                                                                                         14. args[0] = "test";
13. public class Explorer3 {
                                                                                                                         15. System.out.println(args[0]);
14. public static void main(String[] args) {
                                                            102. Given:
                                                                                                                         16. } catch (Exception ex) {
                                                            23. Object [] myObjects = {
15. TreeSet<Integer> s = new
                                                                                                                         17. System.out.println("Exception");
TreeSet<Integer>();
                                                            24. new Integer(12),
                                                                                                                         18. } catch (NullPointerException npe) {
16. TreeSet<Integer> subs = new
                                                            25. new String("foo"),
TreeSet<Integer>();
                                                            26. new Integer(5),
                                                                                                                         System.out.println("NullPointerException");
17. for(int i = 606; i < 613; i++)
                                                            27. new Boolean(true)
                                                                                                                         20.}
18. if(i%2 == 0) s.add(i);
                                                                                                                         21.}
19. subs = (TreeSet)s.subSet(608, true, 611,
                                                            29. Arrays.sort(myObjects);
                                                                                                                         What is the result?
                                                            30. for(int i=0; i<myObjects.length; i++) {
                                                                                                                         A. test
20. subs.add(629);
                                                            31. System.out.print(myObjects[i].toString());
                                                                                                                         B. Exception
21. System.out.println(s + " " + subs);
                                                            32. System.out.print(" ");
                                                                                                                         C. Compilation fails.
                                                                                                                         D. NullPointerException
22.}
                                                            33. }
23.}
                                                            What is the result?
                                                                                                                         Answer: C
What is the result?
                                                            A. Compilation fails due to an error in line 23.
A. Compilation fails.
                                                            B. Compilation fails due to an error in line 29.
                                                                                                                         106. Given:
                                                                                                                         22. public void go() {
B. An exception is thrown at runtime.
                                                            C. A ClassCastException occurs in line 29.
C. [608, 610, 612, 629] [608, 610]
                                                            D. A ClassCastException occurs in line 31.
                                                                                                                         23. String o = "";
D. [608, 610, 612, 629] [608, 610, 629]
                                                            E. The value of all four objects prints in natural
                                                                                                                         24. z:
E. [606, 608, 610, 612, 629] [608, 610]
                                                                                                                         25. for(int x = 0; x < 3; x++) {
                                                            order.
F. [606, 608, 610, 612, 629] [608, 610, 629]
                                                            Answer: C
                                                                                                                         26. for(int y = 0; y < 2; y++) {
                                                                                                                         27. if(x==1) break;
Answer: F
                                                                                                                         28. if(x==2 && y==1) break z;
                                                            103. Given:
                                                            1. public class Donkey {
100. Given:
                                                                                                                         29. o = o + x + y;
11. // insert code here
                                                            2. public static void main(String[] args) {
                                                                                                                         30.}
12. private N min, max;
                                                            3. boolean assertsOn = false;
                                                                                                                         31. }
13. public N getMin() { return min; }
                                                            4. assert (assertsOn): assertsOn = true;
                                                                                                                         32. System.out.println(o);
14. public N getMax() { return max; }
                                                            5. if(assertsOn) {
15. public void add(N added) {
                                                            6. System.out.println("assert is on");
                                                                                                                         What is the result when the go() method is
16. if (min == null | | added.doubleValue() <
                                                                                                                         invoked?
                                                            7. }
min.doubleValue())
                                                            8.}
                                                                                                                         A. 00
                                                                                                                         B. 0001
17. min = added;
                                                            9. }
                                                                                                                         C. 000120
18. if (max == null | | added.doubleValue() >
                                                            If class Donkey is invoked twice, the first time
max.doubleValue()) 19. max = added;
                                                            without assertions enabled, and the second
                                                                                                                         D. 00012021
20.}
                                                            time
                                                                                                                         E. Compilation fails.
                                                            with assertions enabled, what are the results?
21.}
                                                                                                                         F. An exception is thrown at runtime.
Which two, inserted at line 11, will allow the
                                                            A. no output
                                                                                                                         Answer: C
code to compile? (Choose two.)
                                                            B. no output
A. public class MinMax<?> {
                                                            assert is on
                                                                                                                         107. Given:
B. public class MinMax<? extends Number> {
                                                            C. assert is on
                                                                                                                         12. public class Test {
C. public class MinMax<N extends Object> {
                                                                                                                         13. public enum Dogs {collie, harrier};
                                                            D. no output
D. public class MinMax<N extends Number> {
                                                            An AssertionError is thrown.
                                                                                                                         14. public static void main(String [] args) {
                                                                                                                         15. Dogs myDog = Dogs.collie;
E. public class MinMax<? extends Object> {
                                                            E. assert is on
F. public class MinMax<N extends Integer> {
                                                                                                                         16. switch (myDog) {
                                                            An AssertionError is thrown.
Answer: D,F
                                                            Answer: D
                                                                                                                         17. case collie:
                                                                                                                         18. System.out.print("collie");
101. Given:
                                                            104. Given:
                                                                                                                         19. case harrier:
12. import java.util.*;
                                                            11. Float pi = new Float(3.14f);
                                                                                                                         20. System.out.print("harrier");
13. public class Explorer1 {
                                                            12. if (pi > 3) {
                                                                                                                         21.}
14. public static void main(String[] args) {
                                                            13. System.out.print("pi is bigger than 3. ");
                                                                                                                         22.}
15. TreeSet<Integer> s = new
                                                                                                                         23.}
                                                                                                                         What is the result?
TreeSet<Integer>();
                                                            15. else {
                                                            16. System.out.print("pi is not bigger than 3. ");
16. TreeSet<Integer> subs = new
                                                                                                                         A. collie
TreeSet<Integer>();
                                                            17.}
                                                                                                                         B. harrier
                                                            18. finally {
17. for(int i = 606; i < 613; i++)
                                                                                                                         C. Compilation fails.
                                                            19. System.out.println("Have a nice day.");
18. if(i\%2 == 0) s.add(i);
                                                                                                                         D. collie harrier
19. subs = (TreeSet)s.subSet(608, true, 611,
                                                                                                                         E. An exception is thrown at runtime.
                                                            20. }
true);
                                                            What is the result?
                                                                                                                         Answer: D
20. s.add(609);
                                                            A. Compilation fails.
21. System.out.println(s + " " + subs);
                                                            B. pi is bigger than 3.
                                                                                                                         108. Click the Exhibit button. Given:
22.}
                                                            C. An exception occurs at runtime.
                                                                                                                         <img src='./scjp/108.png'></img><br/>
23.}
                                                            D. pi is bigger than 3. Have a nice day.
What is the result?
                                                            E. pi is not bigger than 3. Have a nice day.
                                                                                                                         31. public void method() {
A. Compilation fails.
                                                            Answer: A
                                                                                                                         32. A a = \text{new A()};
B. An exception is thrown at runtime.
                                                                                                                         33. a.method1();
C. [608, 609, 610, 612] [608, 610]
                                                            105. Given:
                                                                                                                         34. }
D. [608, 609, 610, 612] [608, 609, 610]
                                                            11. public static void main(String[] args) {
                                                                                                                         Which statement is true if a TestException is
E. [606, 608, 609, 610, 612] [608, 610]
                                                                                                                         thrown on line 3 of class B?
                                                            12. try {
```

```
A. Line 33 must be called within a try block.
                                                           What is the result?
                                                                                                                       <hr/>
                                                                                                                       <img src='./scjp/116.png'></img><br/>
B. The exception thrown by method1 in class A
is not required to be caught.
                                                           B. 12
C. The method declared on line 31 must be
                                                           C. 14
                                                                                                                       Answer:
declared to throw a RuntimeException.
                                                           D. 123
                                                           E. Compilation fails.
D. On line 5 of class A, the call to method2 of
class B does not need to be placed in a
                                                           F. An exception is thrown at runtime.
                                                                                                                      117. DRAG DROP
try/catch
                                                           Answer: C
block.
                                                                                                                       Click the Task button.
Answer: B
                                                           112. Given:
                                                                                                                       <br/>
                                                                                                                       <img src='./scjp/117.png'></img><br/>
109. Given:
                                                           10. public class Foo {
1. public class Boxer1{
                                                           11. static int[] a;
                                                                                                                       Answer:
2. Integer i;
                                                           12. static { a[0]=2; }
                                                           13. public static void main( String[] args ) {}
3. int x;
4. public Boxer1(int y) {
                                                           14. }
                                                                                                                       118. DRAG DROP
                                                           Which exception or error will be thrown when
5. x = i+y;
6. System.out.println(x);
                                                           a programmer attempts to run this code?
                                                                                                                       Click the Task button.
                                                           A. java.lang.StackOverflowError
                                                                                                                       <br/>
7.}
8. public static void main(String[] args) {
                                                           B. java.lang.lllegalStateException
                                                                                                                       <img src='./scjp/118.png'></img><br/>
new Boxer1(new Integer(4));
                                                           C. java.lang.ExceptionInInitializerError
                                                           D. java.lang.ArrayIndexOutOfBoundsException
10.}
11.}
                                                           Answer: C
                                                                                                                       Answer:
What is the result?
A. The value "4" is printed at the command
                                                           113. Given:
                                                                                                                       119. DRAG DROP
                                                           11. class X { public void foo() {
B. Compilation fails because of an error in line
                                                           System.out.print("X "); } }
                                                                                                                       Click the Task button.
C. Compilation fails because of an error in line
                                                                                                                       <br/>
                                                           13. public class SubB extends X {
                                                                                                                       <img src='./scjp/119.png'></img><br/>
D. A NullPointerException occurs at runtime.
                                                           14. public void foo() throws RuntimeException
E. A NumberFormatException occurs at
                                                           15. super.foo();
                                                                                                                       Answer:
F. An IllegalStateException occurs at runtime.
                                                           16. if (true) throw new RuntimeException();
                                                           17. System.out.print("B");
Answer: D
                                                                                                                       120. Which Man class properly represents the
                                                           18.}
                                                                                                                       relationship "Man has a best friend who is a
110. Given:
                                                           19. public static void main(String[] args) {
                                                                                                                       Dog"?
11. static class A {
                                                           20. new SubB().foo();
12. void process() throws Exception { throw
                                                                                                                       A. class Man extends Dog { }
                                                           21. }
new Exception(); }
                                                                                                                       B. class Man implements Dog { }
                                                           22. }
13.}
                                                           What is the result?
                                                                                                                      C. class Man { private BestFriend dog; }
14. static class B extends A {
                                                           A. X, followed by an Exception.
                                                                                                                       D. class Man { private Dog bestFriend; }
15. void process() { System.out.println("B"); }
                                                                                                                       E. class Man { private Dog<bestFriend>; }
                                                           B. No output, and an Exception is thrown.
                                                           C. Compilation fails due to an error on line 14.
                                                                                                                       F. class Man { private BestFriend<dog>; }
17. public static void main(String[] args) {
                                                           D. Compilation fails due to an error on line 16.
                                                                                                                       Answer: D
18. new B().process();
                                                           E. Compilation fails due to an error on line 17.
19.}
                                                           F. X, followed by an Exception, followed by B.
                                                                                                                       121. A company has a business application that
What is the result?
                                                           Answer: A
                                                                                                                       provides its users with many different reports:
A. B
                                                                                                                       receivables reports, payables reports, revenue
B. The code runs with no output.
                                                           114. DRAG DROP
                                                                                                                       projects, and so on. The company has just
C. Compilation fails because of an error in line
                                                                                                                       purchased some new, state-of-the-art, wireless
                                                           Click the Task button.
                                                                                                                       printers, and a programmer has been assigned
12.
D. Compilation fails because of an error in line
                                                           <br/>
                                                           <img src='./scjp/114.png'></img><br/>
                                                                                                                       task of enhancing all of the reports to use not
E. Compilation fails because of an error in line
                                                                                                                       only the company's old printers, but the new
18.
                                                           Answer:
                                                                                                                       wireless printers as well. When the
Answer: A
                                                                                                                       programmer starts looking into the application,
                                                                                                                       the programmer
111. Given:
                                                           115. DRAG DROP
                                                                                                                       discovers that because of the design of the
1. public class Venus {
                                                                                                                       application, it is necessary to make changes to
2. public static void main(String[] args) {
                                                           Click the Task button.
                                                                                                                       each
                                                                                                                       report to support the new printers. Which two
3. int [] x = \{1,2,3\};
                                                           <br/>
                                                                                                                       design concepts most likely explain this
4. int y[] = \{4,5,6\};
                                                           <img src='./scjp/115.png'></img><br/>
new Venus().go(x,y);
                                                                                                                       situation?
6. }
                                                                                                                       (Choose two.)
7. void go(int[]... z) {
                                                           Answer:
8. for(int[] a : z)
                                                                                                                       A. Inheritance
                                                           116. DRAG DROP
System.out.print(a[0]);
                                                                                                                       B. Low cohesion
10.}
                                                                                                                       C. Tight coupling
                                                           Click the Task button.
                                                                                                                       D. High cohesion
11.}
```

E. Loose coupling	Which two code fragments, inserted	String str1 = (String) build1;
F. Object immutability	independently at line 13, will compile? (Choose	Building build2 = (Building) barn1;
Answer: B,C	two.)	14. }
· ···•··· =/•	A. super(name, baseSalary);	15. }
422 C'		•
122. Given:	B. this.commission = commission;	Which is true?
	C. super();	A. If line 10 is removed, the compilation
2. public class Hi {	this.commission = commission;	succeeds.
3. void m1() { }	D. this.commission = commission;	B. If line 11 is removed, the compilation
4. protected void() m2 { }	super();	succeeds.
	• **	
5. }	E. super(name, baseSalary);	C. If line 12 is removed, the compilation
6. class Lois extends Hi {	this.commission = commission;	succeeds.
7. // insert code here	F. this.commission = commission;	D. If line 13 is removed, the compilation
8. }	super(name, baseSalary);	succeeds.
Which four code fragments, inserted	G. super(name, baseSalary, commission);	E. More than one line must be removed for
independently at line 7, will compile? (Choose	Answer: A,E	compilation to succeed.
four.)		Answer: C
A. public void m1() { }	125. A team of programmers is reviewing a	
B. protected void m1() { }	proposed API for a new utility class. After some	128. Given:
C. private void m1() { }	discussion,	
		1 mublic class TostOne (
D. void m2() { }	they realize that they can reduce the number	1. public class TestOne {
E. public void m2() { }	of methods in the API without losing any	public static void main (String[] args) throws
F. protected void m2() { }	functionality. If they implement the new	Exception {
G. private void m2() { }	design, which two OO principles will they be	3. Thread.sleep(3000);
Answer: A,B,E,F	promoting?	4. System.out.println("sleep");
Allswell A,b,L,i	promoting:	
		5. }
123. Given:	A. Looser coupling	6. }
	B. Tighter coupling	What is the result?
10: public class Hello {	C. Lower cohesion	A. Compilation fails.
· · · · · · · · · · · · · · · · · · ·		
11: String title;	D. Higher cohesion	B. An exception is thrown at runtime.
12: int value;	E. Weaker encapsulation	C. The code executes normally and prints
13: public Hello() {	F. Stronger encapsulation	"sleep".
14: title += " World";	Answer: A	D. The code executes normally, but nothing is
15: }		printed.
•	126 Civon	Answer: C
16: public Hello(int value) {	126. Given:	Allswel. C
17: this.value = value;		
17: this.value = value; 18: title = "Hello";	1. class ClassA {	129. Given
18: title = "Hello";		129. Given
18: title = "Hello"; 19: Hello();	2. public int numberOfInstances;	
18: title = "Hello"; 19: Hello(); 20: }	 public int numberOfInstances; protected ClassA(int numberOfInstances) { 	1. public class Threads4 {
18: title = "Hello"; 19: Hello(); 20: } 21: }	 public int numberOfInstances; protected ClassA(int numberOfInstances) { this.numberOfInstances = 	public class Threads4 { public static void main (String[] args) {
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18: title = "Hello"; 19: Hello(); 20: } 21: } and: 30: Hello c = new Hello(5); 31: System.out.println(c.title); What is the result? A. Hello B. Hello World C. Compilation fails. D. Hello World 5 E. The code runs with no output. F. An exception is thrown at runtime. Answer: C 124. Given: 3. class Employee { 4. String name; double baseSalary; 5. Employee(String name, double baseSalary) { 6. this.name = name; 7. this.baseSalary = baseSalary; 8. } 9. } 10. public class SalesPerson extends Employee {	2. public int numberOfInstances; 3. protected ClassA(int numberOfInstances) { 4. this.numberOfInstances = numberOfInstances; 5. } 6. } 7. public class ExtendedA extends ClassA { 8. private ExtendedA(int numberOfInstances) { 9. super(numberOfInstances); 10. } 11. public static void main(String[] args) { 12. ExtendedA ext = new ExtendedA(420); 13. System.out.print(ext.numberOfInstances); 14. } 15. } Which statement is true? A. 420 is the output. B. An exception is thrown at runtime. C. All constructors must be declared public. D. Constructors CANNOT use the private modifier. E. Constructors CANNOT use the protected modifier. Answer: A 127. Given:	 public class Threads4 { public static void main (String[] args) { new Threads4().go(); } public void go() { Runnable r = new Runnable() { public void run() { System.out.print("foo"); }; Thread t = new Thread(r); t.start(); tstart(); A Compilation fails. An exception is thrown at runtime. The code executes normally and prints "foo". The code executes normally, but nothing is printed. Answer: B
18: title = "Hello"; 19: Hello(); 20: } 21: } and: 30: Hello c = new Hello(5); 31: System.out.println(c.title); What is the result? A. Hello B. Hello World C. Compilation fails. D. Hello World 5 E. The code runs with no output. F. An exception is thrown at runtime. Answer: C 124. Given: 3. class Employee { 4. String name; double baseSalary; 5. Employee(String name, double baseSalary) { 6. this.name = name; 7. this.baseSalary = baseSalary; 8. } 9. } 10. public class SalesPerson extends Employee { 11. double commission; 12. public SalesPerson(String name, double	2. public int numberOfInstances; 3. protected ClassA(int numberOfInstances) { 4. this.numberOfInstances = numberOfInstances; 5. } 6. } 7. public class ExtendedA extends ClassA { 8. private ExtendedA(int numberOfInstances) { 9. super(numberOfInstances); 10. } 11. public static void main(String[] args) { 12. ExtendedA ext = new ExtendedA(420); 13. System.out.print(ext.numberOfInstances); 14. } 15. } Which statement is true? A. 420 is the output. B. An exception is thrown at runtime. C. All constructors must be declared public. D. Constructors CANNOT use the private modifier. E. Constructors CANNOT use the protected modifier. Answer: A 127. Given: 5. class Building { 6. public class Barn extends Building {	 public class Threads4 { public static void main (String[] args) { new Threads4().go(); } public void go() { Runnable r = new Runnable() { public void run() { System.out.print("foo"); }; Thread t = new Thread(r); t.start(); tstart(); A What is the result? Compilation fails. An exception is thrown at runtime. The code executes normally and prints "foo". The code executes normally, but nothing is printed. Answer: B Which two statements are true? (Choose two.) It is possible for more than two threads to
18: title = "Hello"; 19: Hello(); 20: } 21: } and: 30: Hello c = new Hello(5); 31: System.out.println(c.title); What is the result? A. Hello B. Hello World C. Compilation fails. D. Hello World 5 E. The code runs with no output. F. An exception is thrown at runtime. Answer: C 124. Given: 3. class Employee { 4. String name; double baseSalary; 5. Employee(String name, double baseSalary) { 6. this.name = name; 7. this.baseSalary = baseSalary; 8. } 9. } 10. public class SalesPerson extends Employee { 11. double commission; 12. public SalesPerson(String name, double baseSalary, double commission) {	 public int numberOfInstances; protected ClassA(int numberOfInstances) { this.numberOfInstances = numberOfInstances; } public class ExtendedA extends ClassA { private ExtendedA(int numberOfInstances) { super(numberOfInstances); } public static void main(String[] args) { ExtendedA ext = new ExtendedA(420); System.out.print(ext.numberOfInstances); } Which statement is true? 420 is the output. An exception is thrown at runtime. All constructors must be declared public. Constructors CANNOT use the private modifier. Constructors CANNOT use the protected modifier. public class Barn extends Building { public class Barn extends Building { public static void main(String[] args) { 	 public class Threads4 { public static void main (String[] args) { new Threads4().go(); } public void go() { Runnable r = new Runnable() { public void run() { System.out.print("foo"); }; Thread t = new Thread(r); t.start(); tstart(); A Compilation fails. An exception is thrown at runtime. The code executes normally and prints "foo". The code executes normally, but nothing is printed. Answer: B Which two statements are true? (Choose two.) It is possible for more than two threads to deadlock at once.
18: title = "Hello"; 19: Hello(); 20: } 21: } and: 30: Hello c = new Hello(5); 31: System.out.println(c.title); What is the result? A. Hello B. Hello World C. Compilation fails. D. Hello World 5 E. The code runs with no output. F. An exception is thrown at runtime. Answer: C 124. Given: 3. class Employee { 4. String name; double baseSalary; 5. Employee(String name, double baseSalary) { 6. this.name = name; 7. this.baseSalary = baseSalary; 8. } 9. } 10. public class SalesPerson extends Employee { 11. double commission; 12. public SalesPerson(String name, double baseSalary, double commission) { 13. // insert code here	 public int numberOfInstances; protected ClassA(int numberOfInstances) { this.numberOfInstances = numberOfInstances; } public class ExtendedA extends ClassA { private ExtendedA(int numberOfInstances) { super(numberOfInstances); } public static void main(String[] args) { ExtendedA ext = new ExtendedA(420); System.out.print(ext.numberOfInstances); } Which statement is true? 420 is the output. An exception is thrown at runtime. All constructors must be declared public. Constructors CANNOT use the private modifier. Constructors CANNOT use the protected modifier. Constructors CANNOT use the protected modifier. public class Barn extends Building { public class Barn extends Building { public static void main(String[] args) { Building build1 = new Building(); 	 public class Threads4 { public static void main (String[] args) { new Threads4().go(); } public void go() { Runnable r = new Runnable() { public void run() { System.out.print("foo"); }; Thread t = new Thread(r); t.start(); t.start(); A Compilation fails. An exception is thrown at runtime. The code executes normally and prints "foo". The code executes normally, but nothing is printed. Answer: B Which two statements are true? (Choose two.) It is possible for more than two threads to deadlock at once. The JVM implementation guarantees that
18: title = "Hello"; 19: Hello(); 20: } 21: } and: 30: Hello c = new Hello(5); 31: System.out.println(c.title); What is the result? A. Hello B. Hello World C. Compilation fails. D. Hello World 5 E. The code runs with no output. F. An exception is thrown at runtime. Answer: C 124. Given: 3. class Employee { 4. String name; double baseSalary; 5. Employee(String name, double baseSalary) { 6. this.name = name; 7. this.baseSalary = baseSalary; 8. } 9. } 10. public class SalesPerson extends Employee { 11. double commission; 12. public SalesPerson(String name, double baseSalary, double commission) {	 public int numberOfInstances; protected ClassA(int numberOfInstances) { this.numberOfInstances = numberOfInstances; } public class ExtendedA extends ClassA { private ExtendedA(int numberOfInstances) { super(numberOfInstances); } public static void main(String[] args) { ExtendedA ext = new ExtendedA(420); System.out.print(ext.numberOfInstances); } Which statement is true? 420 is the output. An exception is thrown at runtime. All constructors must be declared public. Constructors CANNOT use the private modifier. Constructors CANNOT use the protected modifier. public class Barn extends Building { public class Barn extends Building { public static void main(String[] args) { 	 public class Threads4 { public static void main (String[] args) { new Threads4().go(); } public void go() { Runnable r = new Runnable() { public void run() { System.out.print("foo"); }; Thread t = new Thread(r); t.start(); tstart(); A Compilation fails. An exception is thrown at runtime. The code executes normally and prints "foo". The code executes normally, but nothing is printed. Answer: B Which two statements are true? (Choose two.) It is possible for more than two threads to deadlock at once.

11. Object obj1 = (Object) build1;

- C. Deadlocked threads release once their sleep() method's sleep duration has expired.
 D. Deadlocking can occur only when the wait(), notify(), and notifyAll() methods are used incorrectly.
 E. It is possible for a single-threaded application to deadlock if synchronized blocks are used incorrectly.
 F. If a piece of code is capable of deadlocking,
- you cannot eliminate the possibility of deadlocking by inserting invocations of Thread.yield().

by inserting invocations of Thread.yield(). Answer: A,F

131. Given:

- 1. public class Threads3 implements Runnable {
- 2. public void run() {
- 3. System.out.print("running");
- 4. }
- 5. public static void main(String[] args) {
- 6. Thread t = new Thread(new Threads3());
- 7. t.run();
- 8. t.run();
- 9. t.start();
- 10.}
- 11.}

What is the result?

- A. Compilation fails.
- B. An exception is thrown at runtime.
- C. The code executes and prints "running".
- D. The code executes and prints
- "runningrunning".
- E. The code executes and prints
- "runningrunningrunning".

Answer: E

- 132. Given classes defined in two different files:
- 1. package util;
- 2. public class BitUtils {
- 3. public static void process(byte[] b) { /* more code here */ }
- 4. }
- 1. package app;
- 2. public class SomeApp {
- 3. public static void main(String[] args) {
- 4. byte[] bytes = new byte[256];
- 5. // insert code here
- 6. }
- 7. }

What is required at line 5 in class SomeApp to use the process method of BitUtils?

- A. process(bytes);
- B. BitUtils.process(bytes);
- C. util.BitUtils.process(bytes);
- D. SomeApp cannot use methods in BitUtils.
- E. import util.BitUtils.*; process(bytes);

Answer: C

- 133. A developer is creating a class Book, that needs to access class Paper. The Paper class is deployed in a JAR named myLib.jar. Which three, taken independently, will allow the developer to
- use the Paper class while compiling the Book class? (Choose three.)

- A. The JAR file is located at
- \$JAVA HOME/jre/classes/myLib.jar.
- B. The JAR file is located at
- \$JAVA_HOME/jre/lib/ext/myLib.jar..
- C. The JAR file is located at /foo/myLib.jar and a classpath environment variable is set that includes /foo/myLib.jar/Paper.class.
- D. The JAR file is located at /foo/myLib.jar and a classpath environment variable is set that includes /foo/myLib.jar.
- E. The JAR file is located at /foo/myLib.jar and the Book class is compiled using javac -cp /foo/myLib.jar/Paper Book.java.
- F. The JAR file is located at /foo/myLib.jar and the Book class is compiled using javac -d /foo/myLib.jar Book.java
- G. The JAR file is located at /foo/myLib.jar and the Book class is compiled using javac classpath

/foo/myLib.jar Book.java

Answer: B,D,G

134. Given:

- 11. class Snoochy {
- 12. Boochy booch;
- 13. public Snoochy() { booch = new

Boochy(this); }

- 14.}
- 15
- 16. class Boochy {
- 17. Snoochy snooch;
- 18. public Boochy(Snoochy s) { snooch = s; }
- 19. } And the statements:
- 21. public static void main(String[] args) {
- 22. Snoochy snoog = new Snoochy();
- 23. snoog = null;
- 24. // more code here
- 25.}

Which statement is true about the objects referenced by snoog, snooch, and booch immediately

after line 23 executes?

- A. None of these objects are eligible for garbage collection.
- B. Only the object referenced by booch is eligible for garbage collection.
- C. Only the object referenced by snoog is eligible for garbage collection.
- D. Only the object referenced by snooch is eligible for garbage collection.
- E. The objects referenced by snooch and booch are eligible for garbage collection.

Answer: E

135. Given:

- 3. public class Batman {
- 4. int squares = 81;
- 5. public static void main(String[] args) {
- 6. new Batman().go();
- 7.}
- 8. void go() {
- incr(++squares);
- 10. System.out.println(squares);
- 11. }
- 12. void incr(int squares) { squares += 10; }
- 13.}
- What is the result?
- A. 81

- B. 82
- C. 91
- D. 92
- E. Compilation fails.
- F. An exception is thrown at runtime.
 Answer: B
- Allswel. b
- 136. Given classes defined in two different files:
- 1. package util;
- 2. public class BitUtils {
- private static void process(byte[] b) {}
- 4. }
- 1. package app;
- 2. public class SomeApp {
- 3. public static void main(String[] args) {
- 4. byte[] bytes = new byte[256];
- 5. // insert code here
- 6. }
- 7. }

What is required at line 5 in class SomeApp to use the process method of BitUtils?

- A. process(bytes);
- B. BitUtils.process(bytes);
- C. app.BitUtils.process(bytes);
- D. util.BitUtils.process(bytes);
- E. import util.BitUtils.*; process(bytes);
- F. SomeApp cannot use the process method in BitUtils.

Answer: F

137. A UNIX user named Bob wants to replace his chess program with a new one, but he is not sure

where the old one is installed. Bob is currently able to run a Java chess program starting from

home directory /home/bob using the

command: java -classpath

/test:/home/bob/downloads/*.jar games.Chess Bob's CLASSPATH is set (at login

/usr/lib:/home/bob/classes:/opt/java/lib:/opt/ java/lib/*.jar What is a possible location for the

Chess.class file?

- A. /test/Chess.class
- B. /home/bob/Chess.class
- C. /test/games/Chess.class
- D. /usr/lib/games/Chess.class
- E. /home/bob/games/Chess.class
- F. inside jarfile /opt/java/lib/Games.jar (with a correct manifest)
- G. inside jarfile

/home/bob/downloads/Games.jar (with a correct manifest)

Answer: C

138. Click the Exhibit button.

What is the output of the program shown in the exhibit?

- A. 300-100-100-100
- B. 300-300-100-100-100
- C. 300-300-300-100-100

D. 300-300-300-300-100 Answer: B

		22. public void go() {
139. Given the following directory structure:	142. Given:	23. String o = "";
bigProject source Utils.java classes		24. z:
And the	11. public void testIfA() {	25. for(int x = 0; x < 3; x++) {
following command line invocation: javac -d	12. if (testIfB("True")) {	26. for(int y = 0; y < 2; y++) {
classes source/Utils.java Assume the current	System.out.println("True");	27. if(x==1) break;
directory	14. } else {	28. if($x==2 \&\& y==1$) break z;
is bigProject, what is the result?	System.out.println("Not true");	29. $o = o + x + y$;
	16. }	30.}
A. If the compile is successful, Utils.class is	17. }	31.}
added to the source directory.	18. public Boolean testIfB(String str) {	32. System.out.println(o);
B. The compiler returns an invalid flag error.	return Boolean.valueOf(str);	33.}
C. If the compile is successful, Utils.class is	20. }	What is the result when the go() method is
added to the classes directory.	What is the result when method testIfA is	invoked?
D. If the compile is successful, Utils.class is	invoked?	A. 00
added to the bigProject directory.	A. True	B. 0001
Answer: C	B. Not true	C. 000120
	C. An exception is thrown at runtime.	D. 00012021
	D. Compilation fails because of an error at line	E. Compilation fails.
	12.	F. An exception is thrown at runtime.
140. Given:	E. Compilation fails because of an error at line	Answer: C
	19.	
3. interface Fish { }	Answer: A	146. Given:
4. class Perch implements Fish { }		
5. class Walleye extends Perch { }	143. Given:	11. static void test() {
6. class Bluegill { }		12. try {
7. public class Fisherman {	1. public class Donkey {	13. String x = null;
8. public static void main(String[] args) {	<pre>2. public static void main(String[] args) {</pre>	<pre>14. System.out.print(x.toString() + " ");</pre>
9. Fish f = new Walleye();	3. boolean assertsOn = false;	15.}
10. Walleye w = new Walleye();	<pre>4. assert (assertsOn) : assertsOn = true;</pre>	<pre>16. finally { System.out.print("finally "); }</pre>
11. Bluegill b = new Bluegill();	5. if(assertsOn) {	17.}
12. if(f instanceof Perch) System.out.print("f-p	6. System.out.println("assert is on");	18. public static void main(String[] args) {
");	7.}	19. try { test(); }
13. if(w instanceof Fish) System.out.print("w-f	8. }	20. catch (Exception ex) {
");	9. }	System.out.print("exception "); }
14. if(b instanceof Fish) System.out.print("b-f	If class Donkey is invoked twice, the first time	21.}
");	without assertions enabled, and the second	What is the result?
15. }	time	A. null
16. }	with assertions enabled, what are the results?	B. finally
What is the result?	A. no output	C. null finally
A. w-f	B. no output	D. Compilation fails.
B. f-p w-f	assert is on	E. finally exception
C. w-f b-f	C. assert is on	Answer: E
D. f-p w-f b-f	D. no output	
E. Compilation fails.	An AssertionError is thrown.	147. Given:
F. An exception is thrown at runtime.	E. assert is on	
Answer: B	An AssertionError is thrown.	10. interface Foo {}
	Answer: D	<pre>11. class Alpha implements Foo {}</pre>
141. Given:		<pre>12. class Beta extends Alpha {}</pre>
	144. Given:	13. class Delta extends Beta {
1. public class Breaker2 {		<pre>14. public static void main(String[] args) {</pre>
2. static String o = "";	31. // some code here	<pre>15. Beta x = new Beta();</pre>
3. public static void main(String[] args) {	32. try {	16. // insert code here
4. z:	33. // some code here	17. }
5. for(int x = 2; x < 7; x++) {	34. } catch (SomeException se) {	18.}
6. if(x==3) continue;	35. // some code here	Which code, inserted at line 16, will cause a
7. if(x==5) break z;	36. } finally {	java.lang.ClassCastException?
8. $0 = 0 + x$;	37. // some code here	A. Alpha $a = x$;
9. }	38. }	B. Foo f = (Delta)x;
10. System.out.println(o);	Under which three circumstances will the code	C. Foo f = (Alpha)x;
11. }	on line 37 be executed? (Choose three.)	D. Beta b = (Beta)(Alpha)x;
12. }	A. The instance gets garbage collected.	Answer: B
What is the result?	B. The code on line 33 throws an exception.	
A. 2	C. The code on line 35 throws an exception.	148. Given:
B. 24	D. The code on line 31 throws an exception.	
C. 234	E. The code on line 33 executes successfully.	33. try {
D. 246	Answer: B,C,E	34. // some code here
E. 2346		35. } catch (NullPointerException e1) {
F. Compilation fails.	145. Given:	<pre>36. System.out.print("a");</pre>
Answer: B		37. } catch (Exception e2) {

```
38. System.out.print("b");
                                                            D. test exception end
                                                                                                                        A. public class Employee extends Info
39. } finally {
                                                            E. A Throwable is thrown by main at runtime.
                                                                                                                        implements Data {
40. System.out.print("c");
                                                                                                                        public void load() { /*do something*/ }
If some sort of exception is thrown at line 34,
                                                            152. Given:
                                                                                                                        B. public class Employee implements Info
which output is possible?
                                                                                                                        extends Data {
                                                            1. public class Plant {
                                                                                                                        public void load() { /*do something*/ }
B. b
                                                            2. private String name;
                                                            3. public Plant(String name) { this.name =
                                                                                                                        C. public class Employee extends Info
C. c
D. ac
                                                                                                                        implements Data {
E. abc
                                                            4. public String getName() { return name; }
                                                                                                                        public void load(){ /*do something*/ }
                                                                                                                        public void Info.load(){ /*do something*/ }
Answer: D
                                                            5. }
                                                            1. public class Tree extends Plant {
149. Given:
                                                            2. public void growFruit() { }
                                                                                                                        D. public class Employee implements Info
                                                            3. public void dropLeaves() { }
                                                                                                                        extends Data {
11. public class Test {
                                                            4.}
                                                                                                                        public void Data.load(){ /*do something*/ }
12. public enum Dogs (collie, harrier,
                                                            Which statement is true?
                                                                                                                        public void load(){ /*do something*/ }
shepherd};
                                                            A. The code will compile without changes.
13. public static void main(String [] args) {
                                                            B. The code will compile if public Tree() {
                                                                                                                        E. public class Employee implements Info
14. Dogs myDog = Dogs.shepherd;
                                                            Plant(); } is added to the Tree class.
                                                                                                                        extends Data {
15. switch (myDog) {
                                                            C. The code will compile if public Plant() {
                                                                                                                        public void load(){ /*do something*/ }
                                                            Tree(); } is added to the Plant class.
                                                                                                                        public void Info.load(){ /*do something*/ }
16. case collie:
17. System.out.print("collie");
                                                            D. The code will compile if public Plant() {
                                                                                                                        F. public class Employee extends Info
18. case default:
                                                            this("fern"); } is added to the Plant class.
                                                            E. The code will compile if public Plant() {
19. System.out.print("retriever");
                                                                                                                        implements Data{
                                                            Plant("fern"); } is added to the Plant class.
                                                                                                                        public void Data.load() { /*do something*/ }
20. case harrier:
21. System.out.print("harrier");
                                                            Answer: D
                                                                                                                        public void Info.load() { /*do something*/ }
22.}
23.}
                                                            153. Given:
                                                                                                                        Answer: A
                                                                                                                        156. Given:
What is the result?
                                                            10. class Line {
A. harrier
                                                            11. public static class Point {}
B. shepherd
                                                            12.}
                                                                                                                        11. public class Rainbow {
C. retriever
                                                            13.
                                                                                                                        12. public enum MyColor {
                                                                                                                        13. RED(0xff0000), GREEN(0x00ff00),
                                                            14. class Triangle {
D. Compilation fails.
                                                            15. // insert code here
                                                                                                                        BLUE(0x0000ff);
E. retriever harrier
F. An exception is thrown at runtime.
                                                                                                                        14. private final int rgb;
                                                            Which code, inserted at line 15, creates an
Answer: D
                                                                                                                        15. MyColor(int rgb) { this.rgb = rgb; }
                                                            instance of the Point class defined in Line?
                                                                                                                        16. public int getRGB() { return rgb; }
150. Click the Exhibit button. Given: ClassA a =
                                                            A. Point p = new Point();
new ClassA(); a.methodA(); What is the result?
                                                            B. Line.Point p = new Line.Point();
                                                                                                                        18. public static void main(String[] args) {
                                                            C. The Point class cannot be instatiated at line
                                                                                                                        19. // insert code here
<img src='./scjp/150.png'></img><br/>
                                                                                                                        20.}
A. Compilation fails.
                                                            D. Line I = new Line(); I.Point p = new I.Point();
                                                                                                                        21. }
B. ClassC is displayed.
                                                            Answer: B
                                                                                                                        Which code fragment, inserted at line 19,
C. The code runs with no output.
                                                                                                                        allows the Rainbow class to compile?
D. An exception is thrown at runtime.
                                                            154. Given:
                                                                                                                        A. MyColor skyColor = BLUE;
                                                                                                                        B. MyColor treeColor = MyColor.GREEN;
Answer: D
                                                            10. class Nav{
                                                                                                                        C. if(RED.getRGB() < BLUE.getRGB()) { }
                                                            11. public enum Direction { NORTH, SOUTH,
151. Given:
                                                                                                                        D. Compilation fails due to other error(s) in the
                                                            EAST, WEST }
11. static void test() throws RuntimeException
                                                            12.}
                                                                                                                        E. MyColor purple = new MyColor(0xff00ff);
                                                            13. public class Sprite{
                                                                                                                        F. MyColor purple = MyColor.BLUE +
12. try {
                                                            14. // insert code here
                                                                                                                        MyColor.RED;
13. System.out.print("test ");
                                                                                                                        Answer: B
14. throw new RuntimeException();
                                                            Which code, inserted at line 14, allows the
                                                            Sprite class to compile?
                                                                                                                        157. Given:
16. catch (Exception ex) {
                                                            A. Direction d = NORTH;
System.out.print("exception "); }
                                                                                                                        10. class One {
                                                            B. Nav.Direction d = NORTH:
                                                            C. Direction d = Direction.NORTH;
                                                                                                                        11. void foo() { }
18. public static void main(String[] args) {
                                                            D. Nav.Direction d = Nav.Direction.NORTH;
                                                                                                                        12.}
19. try { test(); }
                                                            Answer: D
                                                                                                                        13. class Two extends One {
20. catch (RuntimeException ex) {
                                                                                                                        14. //insert method here
System.out.print("runtime"); }
                                                            155. Given:
21. System.out.print("end ");
                                                                                                                        Which three methods, inserted individually at
22.}
                                                            10. interface Data { public void load(); }
                                                                                                                        line 14, will correctly complete class Two?
What is the result?
                                                            11. abstract class Info { public abstract void
                                                                                                                        (Choose
                                                            load(); }
                                                                                                                        three.)
A. test end
B. Compilation fails.
                                                            Which class correctly uses the Data interface
                                                                                                                        A. int foo() { /* more code here */ }
C. test runtime end
                                                            and Info class?
                                                                                                                        B. void foo() { /* more code here */ }
```

C. public void foo() { /* more code here */ } D. go in Goban System.out.println(y); D. private void foo() { /* more code here */ } go in Sente 7.} E. protected void foo() { /* more code here */ } E. Compilation fails because of an error in line 8. int go(Boolean b, int i) { Answer: B,C,E 9. if(b) return (i/7); Answer: C 10. return (i/49); 158. Click the Exhibit button. Which statement 11.} is true about the classes and interfaces in the 162. Given: 12.} exhibit? What is the result?
 12. NumberFormat nf = A. 7
 NumberFormat.getInstance(); B. 49 A. Compilation will succeed for all classes and 13. nf.setMaximumFractionDigits(4); C. 343 14. nf.setMinimumFractionDigits(2); D. Compilation fails. B. Compilation of class C will fail because of an 15. String a = nf.format(3.1415926); E. An exception is thrown at runtime. error in line 2. 16. String b = nf.format(2); C. Compilation of class C will fail because of an Which two statements are true about the Answer: B error in line 6. result if the default locale is Locale.US? D. Compilation of class Almpl will fail because (Choose two.) 166. Given: A. The value of b is 2. of an error in line 2. B. The value of a is 3.14. 12. String csv = "Sue,5,true,3"; Answer: C C. The value of b is 2.00. 13. Scanner scanner = new Scanner(csv); 159. Given: D. The value of a is 3.141. 14. scanner.useDelimiter(","); 15. int age = scanner.nextInt(); E. The value of a is 3.1415. 11. public interface A { public void m1(); } F. The value of a is 3.1416. What is the result? A. Compilation fails. 12. G. The value of b is 2.0000. 13. class B implements A { } Answer: C,F B. After line 15, the value of age is 5. C. After line 15, the value of age is 3. 14. class C implements A { public void m1() { } } 15. class D implements A { public void m1(int x) 163. Given: D. An exception is thrown at runtime. 16. abstract class E implements A { } 11. String test = "a1b2c3"; Answer: D 17. abstract class F implements A { public void String[] tokens = test.split("\\d"); 167. Given: 13. for(String s: tokens) System.out.print(s + " 18. abstract class G implements A { public void m1(int x) { } } What is the result? 1. import java.util.*; 2. public class WrappedString { What is the result? A. a b c 3. private String s; B. 123 4. public WrappedString(String s) { this.s = s; } A. Compilation succeeds. C. a1b2c3 B. Exactly one class does NOT compile. D. a1 b2 c3 5. public static void main(String[] args) { C. Exactly two classes do NOT compile. E. Compilation fails. 6. HashSet<Object> hs = new D. Exactly four classes do NOT compile. F. The code runs with no output. HashSet<Obiect>(): E. Exactly three classes do NOT compile. G. An exception is thrown at runtime. 7. WrappedString ws1 = new Answer: C Answer: A WrappedString("aardvark"); 8. WrappedString ws2 = new 160. Given: 164. Given: WrappedString("aardvark"); String s1 = new String("aardvark"); 1. class Alligator { 11. class Converter { 10. String s2 = new String("aardvark"); 2. public static void main(String[] args) { 12. public static void main(String[] args) { 11. hs.add(ws1); hs.add(ws2); hs.add(s1); 3. int $[]x[] = \{\{1,2\}, \{3,4,5\}, \{6,7,8,9\}\};$ 13. Integer i = args[0]; hs.add(s2); 12. System.out.println(hs.size()); } } 14. int j = 12; 4. int [][]y = x;5. System.out.println(y[2][1]); 15. System.out.println("It is " + (j==i) + " that What is the result? j==i."); A. 0 6.} 7. } 16.} B. 1 What is the result? 17.} C. 2 What is the result when the programmer D. 3 A. 2 B. 3 attempts to compile the code and run it with C. 4 F. Compilation fails. D. 6 command java Converter 12? G. An exception is thrown at runtime. A. It is true that j==i. Answer: D F. Compilation fails. B. It is false that j==i. Answer: E C. An exception is thrown at runtime. 168. Given a class whose instances, when D. Compilation fails because of an error in line found in a collection of objects, are sorted by 161. Click the Exhibit button. What is the 13. using the compareTo() method, which two statements Answer: D result? are true? (Choose two.)

 165. Given: A. The class implements java.lang.Comparable. A. go in Goban go in Sente public class BuildStuff { B. The class implements java.util.Comparator. B. go in Sente 2. public static void main(String[] args) { C. The interface used to implement sorting

3. Boolean test = new Boolean(true);

5. Integer y = new BuildStuff().go(test, x);

4. Integer x = 343;

allows this class to define only one sort

sequence.

go in Goban

go in Goban

C. go in Sente

D. The interface used to implement sorting allows this class to define many different sort sequences. Answer: A,C Click the Task button. <pre></pre>	
sequences. Answer: E Answer: A,C	
Answer: A,C	
Answer: 179. Given:	
169. Given:	
174. DRAG DROP 3. public class Breaker {	
1. import java.util.*; 4. static String o = "";	
2. public class Example { Click the Task button. 5. public static void main(String[] args)	
3. public static void main(String[] args) {	
4. // insert code here 7. o = o + 2;	
5. set.add(new Integer(2)); 8. for(int x = 3; x < 8; x++) {	
6. set.add(new Integer(1)); Answer: 9. if(x==4) break;	
7. System.out.println(set); 10. if(x==6) break z;	
8. }	
9. } 175. DRAG DROP 12. }	
Which code, inserted at line 4, guarantees that 13. System.out.println(o);	
this program will output [1, 2]? Click the Task button.	
A. Set set = new TreeSet(); Set Set = new TreeSet();	
w. ·	
C. Set set = new SortedSet(); A. 23	
D. List set = new SortedList(); Answer: B. 234	
E. Set set = new LinkedHashSet(); C. 235	
Answer: A D. 2345	
E. 2357	
170. Given: 176. DRAG DROP F. 23457	
G. Compilation fails.	
11. public class Person { Click the Task button. Answer: G	
12. private name; 	
13. public Person(String name) { br/> 180. Given:	
14. this.name = name;	
15. } Answer: 5. class A {	
16. public int hashCode() { 6. void foo() throws Exception { throw of the public int hashCode() }	3W
17. return 420; Exception(); }	
18. } 177. Given: 7. }	
19. } 1. class TestException extends Exception {} 8. class SubB2 extends A {	
Which statement is true? 2. class A { 9. void foo() { System.out.println("B");	
A. The time to find the value from HashMap 3. public String sayHello(String name) throws 10. }	
with a Person key depends on the size of the TestException { 11. class Tester {	
map. 4. if(name == null) throw new TestException(); 12. public static void main(String[] args	{
B. Deleting a Person key from a HashMap will 5. return "Hello " + name; 13. A a = new SubB2();	
delete all map entries for all keys of type 6. } 14. a.foo();	
Person. 7. } 15. }	
C. Inserting a second Person object into a 8. public class TestA { 16. }	
HashSet will cause the first Person object to be 9. public static void main(String[] args) { What is the result?	
removed as a duplicate. 10. new A().sayHello("Aiko"); A. B	
D. The time to determine whether a Person 11. } B. B, followed by an Exception.	
object is contained in a HashSet is constant 12. } C. Compilation fails due to an error on	ne 9.
and does Which statement is true? D. Compilation fails due to an error on	ne 14.
which statement is true:	
NOT depend on the size of the map. A. Compilation succeeds. E. An Exception is thrown with no other	
NOT depend on the size of the map. A. Compilation succeeds. B. Class A does not compile. E. An Exception is thrown with no other output.	
NOT depend on the size of the map. A. Compilation succeeds. B. Class A does not compile. C. The method declared on line 9 cannot be E. An Exception is thrown with no other output. Answer: D	
NOT depend on the size of the map. Answer: A B. Class A does not compile. C. The method declared on line 9 cannot be modified to throw TestException. C. The method declared on line 9 cannot be modified to throw TestException.	
NOT depend on the size of the map. Answer: A B. Class A does not compile. C. The method declared on line 9 cannot be modified to throw TestException. D. TestA compiles if line 10 is enclosed in a E. An Exception is thrown with no other output. Answer: D 181. Given:	
NOT depend on the size of the map. A. Compilation succeeds. B. Class A does not compile. C. The method declared on line 9 cannot be modified to throw TestException. D. TestA compiles if line 10 is enclosed in a try/catch block that catches TestException.	{
NOT depend on the size of the map. A. Compilation succeeds. B. Class A does not compile. C. The method declared on line 9 cannot be modified to throw TestException. D. TestA compiles if line 10 is enclosed in a click the Task button. Click the Task button. Answer: D 11. public static void main(String[] args	{
NOT depend on the size of the map. A. Compilation succeeds. B. Class A does not compile. C. The method declared on line 9 cannot be modified to throw TestException. D. TestA compiles if line 10 is enclosed in a try/catch block that catches TestException. <a 1"="" href="https://creativecommons.org/line=">	{
NOT depend on the size of the map. A. Compilation succeeds. B. Class A does not compile. C. The method declared on line 9 cannot be modified to throw TestException. D. TestA compiles if line 10 is enclosed in a try/catch block that catches TestException. https://creativecommons.org/https:	{
NOT depend on the size of the map. A. Compilation succeeds. B. Class A does not compile. C. The method declared on line 9 cannot be modified to throw TestException. D. TestA compiles if line 10 is enclosed in a try/catch block that catches TestException. https://creativecommons.org/https:/	{
NOT depend on the size of the map. A. Compilation succeeds. B. Class A does not compile. C. The method declared on line 9 cannot be modified to throw TestException. D. TestA compiles if line 10 is enclosed in a try/catch block that catches TestException. Very/s Answer: D 11. public static void main(String[] args) { 12. String str = "null"; Answer.out.println("null"); 13. jf (str == null) { 14. System.out.println("null"); 15. } else (str.length() == 0) {	{
NOT depend on the size of the map. A. Compilation succeeds. B. Class A does not compile. C. The method declared on line 9 cannot be modified to throw TestException. D. TestA compiles if line 10 is enclosed in a try/catch block that catches TestException. It public static void main(String[] args of the map. A. Compilation succeeds. B. Class A does not compile. Output. Answer: D Answer: D 181. Given: 11. public static void main(String[] args of the map. Answer: 178. Given: 178. Given: 179. DRAG DROP 170. DRAG DROP 171. DRAG DROP 172. DRAG DROP A. Compilation succeeds. B. Class A does not compile. Output. Answer: D 181. Given: 181. Given: 181. Given: 183. if (str == null) { 184. System.out.println("null"); 185. } else (str.length() == 0) { 185. Given: 186. Given: 187. Given: 188. Given: 188. Given: 189. Given: 189. Given: 189. Given: 199. Given:	{
NOT depend on the size of the map. A. Compilation succeeds. B. Class A does not compile. C. The method declared on line 9 cannot be modified to throw TestException. D. TestA compiles if line 10 is enclosed in a try/catch block that catches TestException. Click the Task button. Cbr/> Answer: D 11. public static void main(String[] args of the method declared on line 9 cannot be modified to throw TestException. D. TestA compiles if line 10 is enclosed in a try/catch block that catches TestException. Answer: D 11. public static void main(String[] args of the map. A. Compilation succeeds. E. An Exception is thrown with no other output. Answer: D 181. Given: 11. public static void main(String[] args of the map. 12. String str = "null"; 13. if (str == null) { 14. System.out.println("null"); 15. } else (str.length() == 0) { 16. System.out.println("zero"); 17. } else {	{
NOT depend on the size of the map. A. Compilation succeeds. B. Class A does not compile. C. The method declared on line 9 cannot be modified to throw TestException. D. TestA compiles if line 10 is enclosed in a try/catch block that catches TestException. Click the Task button. Circle the Task button. Answer: Answer: 178. Given: 179. DRAG DROP 11. public static void main(String[] args) { 12. String str = "null"; 13. if (str == null) { 14. System.out.println("null"); 15. } else (str.length() == 0) { 172. DRAG DROP 173. if (i > 6) break; 174. } Click the Task button. 175. Answer: 176. Given: 177. } else { 177. } else { 177. } else { 178. System.out.println("some"); 179. } 179. DRAG DROP 170. DRAG DROP 171. DRAG DROP 172. DRAG DROP 173. if (i > 6) break; 175. } else { 175. } else { 176. System.out.println("some");	{
NOT depend on the size of the map. Answer: A B. Class A does not compile. C. The method declared on line 9 cannot be modified to throw TestException. D. TestA compiles if line 10 is enclosed in a try/catch block that catches TestException. Click the Task button. 	{
NOT depend on the size of the map. Answer: A B. Class A does not compile. C. The method declared on line 9 cannot be modified to throw TestException. D. TestA compiles if line 10 is enclosed in a try/catch block that catches TestException. In public static void main(String[] args of line 10 is enclosed in a late. System.out.println("repro"); In public static void main(String[] args) { In public static void main(Stri	{
NOT depend on the size of the map. Answer: A B. Class A does not compile. C. The method declared on line 9 cannot be modified to throw TestException. D. TestA compiles if line 10 is enclosed in a try/catch block that catches TestException. Click the Task button. cbr/> <imps src="./scjp/171.png"></imps> Answer: 178. Given: 179. DRAG DROP 170. DRAG DROP 170. DRAG DROP 171. public static void main(String[] args) { 172. DRAG DROP 173. if (i> 6) break; Click the Task button. 174. System.out.println("roull"); 175. Jelse { 176. Click the Task button. 177. Jelse { 177. Jelse { 177. System.out.println("some"); 178. Given: 179. System.out.println("some"); 170. DRAG DROP 171. DRAG DROP 172. DRAG DROP 173. if (i> 6) break; 174. Jelse { 175. System.out.println("some"); 176. System.out.println("some"); 177. Jelse { 177. Jelse { 178. System.out.println("some"); 179. Jelse { 179. System.out.println("some"); 170. System.out.println("some"); 171. System.out.println("some"); 172. System.o	{
NOT depend on the size of the map. Answer: A B. Class A does not compile. C. The method declared on line 9 cannot be modified to throw TestException. D. TestA compiles if line 10 is enclosed in a try/catch block that catches TestException. Click the Task button.	{
NOT depend on the size of the map. A. Compilation succeeds. E. An Exception is thrown with no othe output. Answer: A B. Class A does not compile. output. 171. DRAG DROP Answer: D Answer: D 172. DRAG DROP D. TestA compiles if line 10 is enclosed in a try/catch block that catches TestException. 181. Given: Click the Task button. Answer: D 11. public static void main(String[] args stree*./scip/171.png*> Answer: 178. Given: 13. if (str == null) { 14. System.out.println("null"); 15. } else (str.length() == 0) { 15. } else (str.length() == 0) { 16. System.out.println("zero"); 17. } else { 17. } else { 17. } else { 17. } else { 18. System.out.println("some"); 19. } else (str.length() == 0) { 18. System.out.println("some"); 19. } else (str.length() == 0) { 18. System.out.println("some"); 19. } else (str.length() == 0) { 18. System.out.println("some"); 19. } else (str.length() == 0) { 18. System.out.println("some"); 19. } else (str.length() == 0) { 18. System.out.println("some"); 19. } else (str.length() == 0) { 18. System.out.println("some"); 19. } else (str.length() == 0) { 18. System.out.println("some"); 18. System.out.println("some"); 19. } else (str.length() == 0) { 18. System.out.println("some"); 19. } else (str.length() == 0) { 19. } else (str.	{
NOT depend on the size of the map. Answer: A B. Class A does not compile. C. The method declared on line 9 cannot be modified to throw TestException. D. TestA compiles if line 10 is enclosed in a try/catch block that catches TestException. Click the Task button.	{

```
E. An exception is thrown at runtime.
                                                                                                                          26. public String getC() { return super.country;
Answer: D
                                                             A. int []x = \{1,2,3,4,5\};
                                                             for(int y = 0; y < 6; y++)
                                                                                                                          27.}
182. Given:
                                                             System.out.println(x[y]);
                                                                                                                          28. public class Euro extends Money {
                                                             B. static int[] x = \{7,6,5,4\};
                                                                                                                          29. public String getC(int x) { return
1. public class Mule {
                                                             static { x[1] = 8;
                                                                                                                          super.getC(); }
2. public static void main(String[] args) {
                                                             x[4] = 3; 
                                                                                                                          30. public static void main(String[] args) {
                                                                                                                          31. System.out.print(new Yen().getC() + " " +
3. boolean assert = true;
                                                             C. for(int y = 10; y < 10; y++)
4. if(assert) {
                                                             doStuff(y);
                                                                                                                          new Euro().getC());
System.out.println("assert is true");
                                                             D. void doOne(int x) { doTwo(x); }
                                                                                                                          32.}
6.}
                                                             void doTwo(int y) { doThree(y); }
                                                                                                                          33.}
                                                             void doThree(int z) { doTwo(z); }
                                                                                                                          What is the result?
7. }
8.}
                                                             E. for(int x = 0; x < 1000000000; x++)
                                                                                                                          A. Canada
Which command-line invocations will compile?
                                                             doStuff(x);
                                                                                                                          B. null Canada
A. javac Mule.java
                                                             F. void counter(int i) { counter(++i); }
                                                                                                                          C. Canada null
B. javac -source 1.3 Mule.java
                                                             Answer: D,F
                                                                                                                          D. Canada Canada
C. javac -source 1.4 Mule.java
                                                                                                                          E. Compilation fails due to an error on line 26.
                                                             186. Given:
                                                                                                                          F. Compilation fails due to an error on line 29.
D. javac -source 1.5 Mule.java
Answer: B
                                                                                                                          Answer: E
                                                             11. static void test() throws RuntimeException
                                                                                                                          189. Given:
183. Given:
                                                             12. try {
11. static void test() {
                                                             13. System.out.print("test");
                                                                                                                          11. class ClassA {}
                                                                                                                          12. class ClassB extends ClassA {}
12. try {
                                                             14. throw new RuntimeException();
                                                                                                                          13. class ClassC extends ClassA {}
13. String x = null;
14. System.out.print(x.toString() + " ");
                                                             16. catch (Exception ex) {
                                                             System.out.print("exception "); }
                                                                                                                          21. ClassA p0 = new ClassA();
16. finally { System.out.print("finally "); }
                                                                                                                          22. ClassB p1 = new ClassB();
                                                             17. }
                                                             18. public static void main(String[] args) {
17.}
                                                                                                                          23. ClassC p2 = new ClassC();
18. public static void main(String[] args) {
                                                             19. try { test(); }
                                                                                                                          24. ClassA p3 = new ClassB();
                                                                                                                          25. ClassA p4 = new ClassC();
19. try { test(); }
                                                             20. catch (RuntimeException ex) {
20. catch (Exception ex) {
                                                             System.out.print("runtime"); }
                                                                                                                          Which three are valid? (Choose three.)
System.out.print("exception "); }
                                                             21. System.out.print("end");
                                                                                                                          A. p0 = p1;
21. }
                                                             22.}
                                                                                                                          B. p1 = p2;
What is the result?
                                                             What is the result?
                                                                                                                          C. p2 = p4;
                                                                                                                          D. p2 = (ClassC)p1;
A. null
                                                             A. test end
B. finally
                                                             B. Compilation fails.
                                                                                                                          E. p1 = (ClassB)p3;
C. null finally
                                                             C. test runtime end
                                                                                                                          F. p2 = (ClassC)p4;
D. Compilation fails.
                                                             D. test exception end
                                                                                                                          Answer: A,E,F
E. finally exception
                                                             E. A Throwable is thrown by main at runtime.
Answer: E
                                                             Answer: D
                                                                                                                          190. Which three statements are true?
                                                                                                                          (Choose three.)
184. Given:
                                                             187. Given:
                                                                                                                          A. A final method in class X can be abstract if
1. public class Boxer1{
                                                             11. public static void main(String[] args) {
                                                                                                                          and only if X is abstract.
2. Integer i;
                                                             12. Integer i = new Integer(1) + new Integer(2);
                                                                                                                          B. A protected method in class X can be
3. int x;
                                                             13. switch(i) {
                                                                                                                          overridden by any subclass of X.
4. public Boxer1(int y) {
                                                             14. case 3: System.out.println("three"); break;
                                                                                                                          C. A private static method can be called only
                                                             15. default: System.out.println("other"); break;
                                                                                                                          within other static methods in class X.
5. x = i+v:
6. System.out.println(x);
                                                             16.}
                                                                                                                          D. A non-static public final method in class X
                                                             17.}
                                                                                                                          can be overridden in any subclass of X.
8. public static void main(String[] args) {
                                                             What is the result?
                                                                                                                          E. A public static method in class X can be
9. new Boxer1(new Integer(4));
                                                             A. three
                                                                                                                          called by a subclass of X without explicitly
10.}
                                                             B. other
                                                                                                                          referencing
11.}
                                                             C. An exception is thrown at runtime.
                                                                                                                          the class X.
What is the result?
                                                             D. Compilation fails because of an error on line
                                                                                                                          F. A method with the same signature as a
A. The value "4" is printed at the command
                                                                                                                          private final method in class X can be
                                                             E. Compilation fails because of an error on line
                                                                                                                          implemented in a
B. Compilation fails because of an error in line
                                                                                                                          subclass of X.
                                                             F. Compilation fails because of an error on line
                                                                                                                          G. A protected method in class X can be
C. Compilation fails because of an error in line
                                                             15.
                                                                                                                          overridden by a subclass of X only if the
                                                             Answer: A
9.
                                                                                                                          subclass is in
D. A NullPointerException occurs at runtime.
                                                                                                                          the same package as X.
E. A NumberFormatException occurs at
                                                             188. Given:
                                                                                                                          Answer: B,E,F
runtime.
F. An IllegalStateException occurs at runtime.
                                                             21. class Money {
                                                                                                                          191. Given:
                                                             22. private String country = "Canada";
Answer: D
                                                                                                                          10. interface A { void x(); }
                                                             23. public String getC() { return country; }
185. Which two code fragments are most likely
                                                                                                                          11. class B implements A { public void x() {}
to cause a StackOverflowError? (Choose two.)
                                                             25. class Yen extends Money {
                                                                                                                          public void y() {} }
```

```
12. class C extends B { public void x() {} }
                                                           A. Tight coupling
                                                                                                                       16. Date d = new Date(0L);
                                                           B. Low cohesion
                                                                                                                       17. String ds = "December 15, 2004";
20. java.util.List<A> list = new
                                                           C. High cohesion
                                                                                                                       18. // insert code here What updates d's value
java.util.ArrayList<A>();
                                                           D. Loose coupling
                                                                                                                       with the date represented by ds?
21. list.add(new B());
                                                           E. Weak encapsulation
                                                                                                                       A. 18. d = df.parse(ds);
22. list.add(new C());
                                                           F. Strong encapsulation
                                                                                                                       B. 18. d = df.getDate(ds);
23. for (A a : list) {
                                                           Answer: E
                                                                                                                       C. 18. try {
24. a.x();
                                                                                                                       19. d = df.parse(ds);
                                                                                                                       20. } catch(ParseException e) { };
25. a.y();
                                                           195. Given:
26.}
                                                                                                                       D. 18. try {
What is the result?
                                                           5. class Thingy { Meter m = new Meter(); }
                                                                                                                       19. d = df.getDate(ds);
A. The code runs with no output.
                                                           6. class Component { void go() {
                                                                                                                       20. } catch(ParseException e) { };
B. An exception is thrown at runtime.
                                                           System.out.print("c"); } }
C. Compilation fails because of an error in line
                                                           7. class Meter extends Component { void go() {
                                                                                                                       Answer: C
                                                           System.out.print("m"); } }
                                                                                                                       199. Which two scenarios are NOT safe to
D. Compilation fails because of an error in line
                                                           9. class DeluxeThingy extends Thingy {
                                                                                                                       replace a StringBuffer object with a
E. Compilation fails because of an error in line
                                                           10. public static void main(String[] args) {
                                                                                                                       StringBuilder object?
                                                           11. DeluxeThingy dt = new DeluxeThingy();
                                                                                                                       (Choose two.)
F. Compilation fails because of an error in line
                                                           12. dt.m.go();
25.
                                                           Thingy t = new DeluxeThingy();
                                                                                                                       A. When using versions of Java technology
                                                                                                                       earlier than 5.0.
Answer: F
                                                           14. t.m.go();
                                                           15.}
                                                                                                                       B. When sharing a StringBuffer among multiple
192. Given:
                                                           16.}
                                                                                                                       threads.
                                                           Which two are true? (Choose two.)
                                                                                                                       C. When using the java.io class
                                                                                                                       StringBufferInputStream.
1. package test;
                                                           A. The output is mm.
                                                           B. The output is mc.
                                                                                                                       D. When you plan to reuse the StringBuffer to
3. class Target {
                                                           C. Component is-a Meter.
                                                                                                                       build more than one string.
4. public String name = "hello";
                                                           D. Component has-a Meter.
                                                                                                                       Answer: A,B
                                                           E. DeluxeThingy is-a Component.
What can directly access and change the value
                                                                                                                       200. Given:
                                                           F. DeluxeThingy has-a Component.
of the variable name?
                                                           Answer: A,F
                                                                                                                       11. String test = "a1b2c3";
                                                           196. Given:
                                                                                                                       12. String[] tokens = test.split("\\d");
A. any class
B. only the Target class
                                                                                                                       13. for(String s: tokens) System.out.print(s + "
                                                           10. interface Jumper { public void jump(); } ...
C. any class in the test package
                                                                                                                       ");
D. any class that extends Target
                                                           20. class Animal {} ...
                                                                                                                       What is the result?
Answer: C
                                                           30. class Dog extends Animal {
                                                                                                                       A.abc
                                                           31. Tail tail; 32. } ...
                                                                                                                       B. 123
193. Click the Exhibit button. What two must
                                                           40. class Beagle extends Dog implements
                                                                                                                       C. a1b2c3
the programmer do to correct the compilation
                                                           Jumper{
                                                                                                                       D. a1 b2 c3
                                                           41. public void jump() {}
errors?
                                                                                                                       E. Compilation fails.
                                                                                                                       F. The code runs with no output.
(Choose two.)
                                                           42. } ...
                                                           50. class Cat implements Jumper{
<br/>
                                                                                                                       G. An exception is thrown at runtime.
                                                           51. public void jump() {}
<img src='./scjp/193.png'></img><br/>
                                                                                                                       Answer: A
                                                                                                                       201. Given:
A. insert a call to this() in the Car constructor
                                                           Which three are true? (Choose three.)
B. insert a call to this() in the MeGo
                                                           A. Cat is-a Animal
constructor
                                                           B. Cat is-a Jumper
                                                                                                                       1. public class TestString3 {
C. insert a call to super() in the MeGo
                                                           C. Dog is-a Animal
                                                                                                                       2. public static void main(String[] args) {
constructor
                                                           D. Dog is-a Jumper
                                                                                                                       3. // insert code here
D. insert a call to super(vin) in the MeGo
                                                           E. Cat has-a Animal
                                                                                                                       System.out.println(s);
                                                           F. Beagle has-a Tail
                                                                                                                       6. }
E. change the wheelCount variable in Car to
                                                           G. Beagle has-a Jumper
                                                                                                                       7.}
protected
                                                           Answer: B.C.F
F. change line3 in the MeGo class to
                                                                                                                       Which two code fragments, inserted
super.wheelCount = 3;
                                                           197. Click the Exhibit button. What is the
                                                                                                                       independently at line 3, generate the output
                                                           result?
                                                                                                                       4247? (Choose
Answer: D,E
                                                           <br/>
                                                                                                                       two.)
194. A team of programmers is involved in
                                                           <img src='./scjp/197.png'></img><br/>
                                                                                                                       A. String s = "123456789";
reviewing a proposed design for a new utility
                                                           A. Value is: 8
                                                           B. Compilation fails.
                                                                                                                       s = (s-"123").replace(1,3,"24") - "89";
class. After
                                                                                                                       B. StringBuffer s = new
some discussion, they realize that the current
                                                           C. Value is: 12
design allows other classes to access methods
                                                           D. Value is: -12
                                                                                                                       StringBuffer("123456789");
                                                           E. The code runs with no output.
                                                                                                                       s.delete(0,3).replace(1,3,"24").delete(4,6);
the utility class that should be accessible only
                                                           F. An exception is thrown at runtime.
                                                                                                                       C. StringBuffer s = new
to methods within the utility class itself. What
                                                           Answer: A
                                                                                                                       StringBuffer("123456789");
                                                                                                                       s.substring(3,6).delete(1,3).insert(1, "24");
issue has the team discovered?
                                                           198. Given a valid DateFormat object named
                                                                                                                       D. StringBuilder s = new
```

df, and

StringBuilder("123456789");

```
s.substring(3,6).delete(1,2).insert(1, "24");
                                                            15. public static void main(String [] args) {
                                                                                                                         What is the result?
E. StringBuilder s = new
                                                            16. int x = 5:
                                                                                                                         A. The file will compile without error.
StringBuilder("123456789");
                                                             17. new TestDeclare().doStuff(++x);
                                                                                                                         B. Compilation fails. Only line 7 contains an
s.delete(0,3).delete(1,3).delete(2,5).insert(1,
"24"):
                                                            19. void doStuff(int s) {
                                                                                                                         C. Compilation fails. Only line 12 contains an
Answer: B,E
                                                            20. s += EASY + ++s;
                                                            21. System.out.println("s " + s);
                                                                                                                         D. Compilation fails. Only line 13 contains an
202. Given:
                                                             22. }
                                                                                                                         error.
                                                            23.}
                                                                                                                         E. Compilation fails. Only lines 7 and 12 contain
11. String test = "Test A. Test B. Test C.";
                                                            What is the result?
12. // insert code here
                                                            A. s 14
                                                                                                                         F. Compilation fails. Only lines 7 and 13 contain
13. String[] result = test.split(regex);
                                                            B. s 16
Which regular expression, inserted at line 12,
                                                            C. s 10
                                                                                                                         G. Compilation fails. Lines 7, 12, and 13 contain
correctly splits test into "Test A", "Test B", and
                                                            D. Compilation fails.
                                                                                                                         errors.
"Test
                                                            E. An exception is thrown at runtime.
                                                                                                                         Answer: A
C"?
A. String regex = "";
                                                                                                                         209. Given:
B. String regex = " ";
                                                             206. Click the Exhibit button. Which three code
C. String regex = ".*";
                                                            fragments, added individually at line 29,
                                                                                                                         3. interface Fish { }
D. String regex = "\\s";
                                                            produce the
                                                                                                                         4. class Perch implements Fish { }
E. String regex = "\\.\\s*";
                                                            output 100? (Choose three.)
                                                                                                                         5. class Walleye extends Perch { }
F. String regex = "\\w[\.] +";
                                                                                                                         6. class Bluegill { }
                                                             <br/>
Answer: E
                                                             <img src='./scjp/206.png'></img><br/>
                                                                                                                         7. public class Fisherman {
                                                                                                                         8. public static void main(String[] args) {
                                                                                                                         9. Fish f = new Walleye();
203. Which statement is true?
                                                            A. n = 100;
                                                            B. i.setX( 100 );
                                                                                                                         10. Walleye w = new Walleye();
A. A class's finalize() method CANNOT be
                                                            C. o.getY().setX( 100 );
                                                                                                                         11. Bluegill b = new Bluegill();
invoked explicitly.
                                                            D. i = new Inner(); i.setX( 100 );
                                                                                                                         12. if(f instanceof Perch) System.out.print("f-p
B. super.finalize() is called implicitly by any
                                                            E. o.setY( i ); i = new Inner(); i.setX( 100 );
overriding finalize() method.
                                                            F. i = new Inner(); i.setX( 100 ); o.setY( i );
                                                                                                                         13. if(w instanceof Fish) System.out.print("w-f
C. The finalize() method for a given object is
                                                            Answer: B,C,F
called no more than once by the garbage
                                                                                                                         14. if(b instanceof Fish) System.out.print("b-f
collector.
                                                             207. Given:
D. The order in which finalize() is called on two
                                                                                                                         15.}
objects is based on the order in which the two
                                                             11. public class Commander {
                                                                                                                         16.}
                                                            12. public static void main(String[] args) {
                                                                                                                         What is the result?
objects became finalizable.
Answer: C
                                                             13. String myProp = /* insert code here */
                                                                                                                         A. w-f
                                                            14. System.out.println(myProp);
                                                                                                                         B. f-p w-f
204. Given:
                                                            15.}
                                                                                                                         C. w-f b-f
                                                                                                                         D. f-p w-f b-f
11. public class ItemTest {
                                                            and the command line:
                                                                                                                         E. Compilation fails.
                                                             java -Dprop.custom=gobstopper Commander
12. private final int id;
                                                                                                                         F. An exception is thrown at runtime.
13. public ItemTest(int id) { this.id = id; }
                                                             Which two, placed on line 13, will produce the
                                                                                                                         Answer: B
14. public void updateId(int newId) { id =
                                                            output gobstopper? (Choose two.)
newld; }
                                                            A. System.load("prop.custom");
                                                                                                                         210. Click the Exhibit button. Given the fully-
                                                            B. System.getenv("prop.custom");
15.
                                                                                                                         qualified class names: com.foo.bar.Dog
16. public static void main(String[] args) {
                                                             C. System.property("prop.custom");
                                                                                                                         com.foo.bar.blatz.Book com.bar.Car
17. ItemTest fa = new ItemTest(42);
                                                             D. System.getProperty("prop.custom");
                                                                                                                         com.bar.blatz.Sun Which graph represents the
18. fa.updateId(69);
19. System.out.println(fa.id);
                                                            System.getProperties().getProperty("prop.cust
                                                                                                                         directory structure for a JAR file from which
20.}
                                                            om"):
                                                                                                                         those classes can be used by the compiler and
21.}
                                                            Answer: D.E
                                                                                                                         JVM?
What is the result?
                                                            208. Given:
                                                                                                                         <img src='./scjp/210.png'></img><br/>
A. Compilation fails.
B. An exception is thrown at runtime.
C. The attribute id in the ItemTest object
                                                            1. interface DoStuff2 {
                                                                                                                         A. Jar A
remains unchanged.
                                                             2. float getRange(int low, int high); }
                                                                                                                         B. Jar B
D. The attribute id in the ItemTest object is
                                                                                                                         C. Jar C
modified to the new value.
                                                            4. interface DoMore {
                                                                                                                         D. Jar D
E. A new ItemTest object is created with the
                                                            5. float getAvg(int a, int b, int c); }
                                                                                                                         E. Jar E
preferred value in the id attribute.
                                                                                                                         Answer: A
                                                            7. abstract class DoAbstract implements
Answer: A
                                                             DoStuff2, DoMore { }
                                                                                                                         211. Given:
205. Given:
                                                            9. class DoStuff implements DoStuff2 {
                                                                                                                         1. package com.company.application;
11. interface DeclareStuff {
                                                            10. public float getRange(int x, int y) { return
12. public static final int EASY = 3;
                                                            3.14f; } }
                                                                                                                         3. public class MainClass {
                                                                                                                         4. public static void main(String[] args) {}
13. void doStuff(int t); }
14. public class TestDeclare implements
                                                            12. interface DoAll extends DoMore {
                                                                                                                         5. }
DeclareStuff {
                                                            13. float getAvg(int a, int b, int c, int d); }
```

And MainClass exists in the C. apple apple D. If a HashSet contains more than one Person /apps/com/company/application directory. D. apple banana object with name="Fred", then removing Assume the CLASSPATH E. banana banana another environment variable is set to "." (current Person, also with name="Fred", will remove Answer: D directory). Which two java commands entered them all. 214. Given a pre-generics implementation of a Answer: B command line will run MainClass? (Choose method: two.) A. java MainClass if run from the /apps 11. public static int sum(List list) { 217. Given: 12. int sum = 0; B. java com.company.application.MainClass if 13. for (Iterator iter = list.iterator(); 3. import java.util.*; run from the /apps directory iter.hasNext();) { 4. public class Hancock { C. java -classpath /apps 14. int i = ((Integer)iter.next()).intValue(); 5. // insert code here com.company.application.MainClass if run 15. sum += i; 6. list.add("foo"); from any directory 16.} 7.} D. java -classpath . MainClass if run from the 17. return sum; 8.} /apps/com/company/application directory Which two code fragments, inserted E. java -classpath What three changes allow the class to be used independently at line 5, will compile without /apps/com/company/application:. MainClass if with generics and avoid an unchecked warnings? run from the /apps directory warning? (Choose two.) A. public void addStrings(List list) { F. java com.company.application.MainClass if (Choose three.) run from the /apps/com/company/application A. Remove line 14. B. public void addStrings(List<String> list) { directory B. Replace line 14 with "int i = iter.next();" C. public void addStrings(List<? super String> C. Replace line 13 with "for (int i: intList) {". list) { Answer: B,C D. Replace line 13 with "for (Iterator iter: D. public void addStrings(List<? extends String> 212. Given: intList) {". list) { E. Replace the method declaration with Answer: B,C 12. import java.util.*; "sum(List<int> intList)". F. Replace the method declaration with 13. public class Explorer2 { 218. Given: 14. public static void main(String[] args) { "sum(List<Integer> intList)". 1. public class Threads4 { 15. TreeSet<Integer> s = new Answer: A,C,F 2. public static void main (String[] args) { TreeSet<Integer>(); 16. TreeSet<Integer> subs = new 215. Given: 3. new Threads4().go(); TreeSet<Integer>(); 4.} 17. for(int i = 606; i < 613; i++) 34. HashMap props = new HashMap(); 5. public void go() { 35. props.put("key45", "some value");
36. props.put("key12", "some other value");
37. props.put("key39", "yet another value"); 6. Runnable r = new Runnable() { 18. if(i%2 == 0) s.add(i);19. subs = (TreeSet)s.subSet(608, true, 611, 7. public void run() { 8. System.out.print("foo"); 20. s.add(629); 38. Set s = props.keySet(); 9.} 21. System.out.println(s + " " + subs); 39. // insert code here What, inserted at line 10. }; 22.} 39, will sort the keys in the props HashMap? 11. Thread t = new Thread(r); 23.} 12. t.start(); A. Arrays.sort(s); What is the result? B. s = new TreeSet(s); 13. t.start(); A. Compilation fails. C. Collections.sort(s); 14.} B. An exception is thrown at runtime. D. s = new SortedSet(s); 15.} C. [608, 610, 612, 629] [608, 610] Answer: B What is the result? D. [608, 610, 612, 629] [608, 610, 629] A. Compilation fails. E. [606, 608, 610, 612, 629] [608, 610] 216. Given: B. An exception is thrown at runtime. F. [606, 608, 610, 612, 629] [608, 610, 629] C. The code executes normally and prints Answer: E 11. public class Person { 12. private String name; D. The code executes normally, but nothing is 213. Given that the elements of a 13. public Person(String name) { printed. PriorityQueue are ordered according to natural 14. this.name = name; Answer: B ordering, and: 15. } 16. public boolean equals(Object o) { 219. Given: 17. if (! (o instanceof Person)) return false; 2. import java.util.*; 3. public class GetInLine { 18. Person p = (Person) o; 1. public class TestOne { 4. public static void main(String[] args) { 2. public static void main (String[] args) throws 19. return p.name.equals(this.name); 5. PriorityQueue<String> pq = new 20.} Exception { PriorityQueue<String>(); 3. Thread.sleep(3000); pq.add("banana"); Which statement is true? 4. System.out.println("sleep"); 7. pq.add("pear"); A. Compilation fails because the hashCode 5.} 8. pq.add("apple"); method is not overridden. 6. } 9. System.out.println(pq.poll() + " " + B. A HashSet could contain multiple Person What is the result? pq.peek()); objects with the same name. A. Compilation fails. 10.} C. All Person objects will have the same hash B. An exception is thrown at runtime. 11.} code because the hashCode method is not C. The code executes normally and prints What is the result? overridden. "sleep". A. apple pear D. The code executes normally, but nothing is

printed.

B. banana pear

Answer: C	10. interface Data { public void load(); }	F. abstract
	11. abstract class Info { public abstract void	G. protected
220. Given:	load(); }	Answer: A,B,D
1 and the class Took Course automate Through (Which class correctly uses the Data interface	22C Circan
1. public class TestSeven extends Thread {	and Info class?	226. Given:
2. private static int x;3. public synchronized void doThings() {	A. public class Employee extends Info implements Data {	1. interface TestA { String toString(); }
4. int current = x;	public void load() { /*do something*/ }	2. public class Test {
5. current++;	}	3. public static void main(String[] args) {
6. x = current;	B. public class Employee implements Info	4. System.out.println(new TestA() {
7. }	extends Data {	5. public String toString() { return "test"; }
8. public void run() {	public void load() { /*do something*/ }	6. });
9. doThings();	}	7. }
10.}	C. public class Employee extends Info	8. }
11.}	implements Data {	What is the result?
Which statement is true?	<pre>public void load(){ /*do something*/ }</pre>	A. test
A. Compilation fails.	<pre>public void Info.load(){ /*do something*/ }</pre>	B. null
B. An exception is thrown at runtime.	}	C. An exception is thrown at runtime.
C. Synchronizing the run() method would make	D. public class Employee implements Info	D. Compilation fails because of an error in line
the class thread-safe.	extends Data {	1.
D. The data in variable "x" are protected from	<pre>public void Data.load(){ /*do something*/ }</pre>	E. Compilation fails because of an error in line
concurrent access problems.	<pre>public void load(){ /*do something*/ }</pre>	4.
E. Declaring the doThings() method as static	}	F. Compilation fails because of an error in line
would make the class thread-safe.	E. public class Employee implements Info	5.
F. Wrapping the statements within doThings()	extends Data {	Answer: A
in a synchronized(new Object()) { } block would	<pre>public void load(){ /*do something*/ }</pre>	
make the class thread-safe.	public void Info.load(){ /*do something*/ }	227. Given:
Answer: E	}	
224 144 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	F. public class Employee extends Info	11. public interface A { public void m1(); }
221. Which two code fragments will execute	implements Data{	12.
the method doStuff() in a separate thread?	public void Data.load() { /*do something*/ }	13. class B implements A { }
(Choose two.)	public void Info.load() { /*do something*/ }	14. class C implements A { public void m1() { } }
A now Throad/\ (Anguari A	15. class D implements A { public void m1(int x)
A. new Thread() {	Answer: A	{}}
<pre>public void run() { doStuff(); }}; B. new Thread() {</pre>	224. Given:	16. abstract class E implements A { } 17. abstract class F implements A { public void
public void start() { doStuff(); } };	ZZ4. GIVEII.	m1() { } }
C. new Thread() {	11. public static void parse(String str) {	18. abstract class G implements A { public void
public void start() { doStuff(); } }.run();	12. try {	m1(int x) { } }
D. new Thread() {	13. float f = Float.parseFloat(str);	What is the result?
public void run() { doStuff(); } }.start();	14. } catch (NumberFormatException nfe) {	A. Compilation succeeds.
E. new Thread(new Runnable() {	15. f = 0;	B. Exactly one class does NOT compile.
public void run() { doStuff(); }}).run();	16. } finally {	C. Exactly two classes do NOT compile.
F. new Thread(new Runnable() {	17. System.out.println(f);	D. Exactly four classes do NOT compile.
<pre>public void run() { doStuff(); } }).start();</pre>	18. }	E. Exactly three classes do NOT compile.
	19. }	Answer: C
Answer: D,F	20. public static void main(String[] args) {	
	21. parse("invalid");	228. Given:
222. Given:	22. }	
	What is the result?	21. abstract class C1 {
11. public static void main(String[] args) {	A. 0.0	22. public C1() { System.out.print(1); }
12. Object obj = new int[] { 1, 2, 3 };	B. Compilation fails.	23. }
13. int[] someArray = (int[])obj;	C. A ParseException is thrown by the parse	24. class C2 extends C1 {
14. for (int i : someArray) System.out.print(i + "	method at runtime.	25. public C2() { System.out.print(2); }
");	D. A NumberFormatException is thrown by the	26. }
15. }	parse method at runtime.	27. class C3 extends C2 {
What is the result?	Answer: B	28. public C3() { System.out.println(3); }
		29. }
A. 123	225. Given	30. public class Ctest {
B. Compilation fails because of an error in line		31. public static void main(String[] a) { new
12.	11. public interface Status {	C3(); }
C. Compilation fails because of an error in line	12. /* insert code here */ int MY_VALUE = 10;	32. }
13.	13. }	What is the result?
D. Compilation fails because of an error in line	Which three are valid on line 12? (Choose	A. 3
14.	three.)	B. 23
E. A ClassCastException is thrown at runtime.	A. final	C. 32
Answer: A	B. static C. native	D. 123 E. 321
223. Given:		F. Compilation fails.
ZZJ. GIVEII.	D. public	·
	E. private	G. An exception is thrown at runtime.

Answer: D	9. public String toString() { return	14. System.out.print(str.charAt(check -= 1) +",
/ MSWCI. D	Integer.toString(weight); }	");
229. Click the Exhibit button. What is the	10. }	15. } else {
result?	11. public class TestPayload {	16. System.out.print(str.charAt(0) + ", ");
 	static void changePayload(Payload p) { /*	17. }
 	insert code */ }	18. } and the invocation:
A. 4321	<pre>13. public static void main(String[] args) {</pre>	21. test("four");
B. 0000	14. Payload p = new Payload(200);	22. test("tee");
C. An exception is thrown at runtime.	15. p.setWeight(1024);	23. test("to");
D. Compilation fails because of an error in line	16. changePayload(p);	What is the result?
18. Answer: D	17. System.out.println("p is " + p);	A. r, t, t,
Allswer: D	18. }} Which code fragment, inserted at the end of	B. r, e, o, C. Compilation fails.
230. Given:	line 12, produces the output p is 420?	D. An exception is thrown at runtime.
250. diven.	A. p.setWeight(420);	Answer: C
10. class One {	B. p.changePayload(420);	71131101. 0
11. public One foo() { return this; }	C. p = new Payload(420);	239. A developer is creating a class Book, that
12.}	D. Payload.setWeight(420);	needs to access class Paper. The Paper class is
13. class Two extends One {	E. p = Payload.setWeight(420);	deployed in a JAR named myLib.jar. Which
14. public One foo() { return this; }	Answer: A	three, taken independently, will allow the
15. }		developer to
16. class Three extends Two {	236. Given:	use the Paper class while compiling the Book
17. // insert method here		class? (Choose three.)
18. }	11. public void genNumbers() {	
Which two methods, inserted individually,	12. ArrayList numbers = new ArrayList();	A. The JAR file is located at
correctly complete the Three class? (Choose	13. for (int i=0; i<10; i++) {	\$JAVA_HOME/jre/classes/myLib.jar.
two.)	14. int value = i * ((int) Math.random());	B. The JAR file is located at
A. public void foo() {}	15. Integer intObj = new Integer(value);	\$JAVA_HOME/jre/lib/ext/myLib.jar
B. public int foo() { return 3; } C. public Two foo() { return this; }	16. numbers.add(intObj); 17. }	C. The JAR file is located at /foo/myLib.jar and a classpath environment variable is set that
D. public One foo() { return this; }	17. ; 18. System.out.println(numbers);	includes /foo/myLib.jar/Paper.class.
E. public Object foo() { return this; }	19. }	D. The JAR file is located at /foo/myLib.jar and
2. pasite object root/y (return tins) j	Which line of code marks the earliest point	a classpath environment variable is set that
Answer: C,D	that an object referenced by intObj becomes a	includes /foo/myLib.jar.
· · · · · ·	candidate for garbage collection?	E. The JAR file is located at /foo/myLib.jar and
231. DRAG DROP	A. Line 16	the Book class is compiled using javac -cp
	B. Line 17	/foo/myLib.jar/Paper Book.java.
Click the Task button.	C. Line 18	F. The JAR file is located at /foo/myLib.jar and
 	D. Line 19	the Book class is compiled using javac -d
 	E. The object is NOT a candidate for garbage	/foo/myLib.jar Book.java
Answer:	collection.	G. The JAR file is located at /foo/myLib.jar and
	Answer: D	the Book class is compiled using javac -
232. DRAG DROP		classpath
	237. Given a correctly compiled class whose	/foo/myLib.jar Book.java
Click the Task button.	source code is:	Answer: B,D,G
<pre> <br <="" td=""><td>1 madrage com sun signi</td><td>240. Given:</td></br></br></pre>	1 madrage com sun signi	240. Given:
 Answer:	package com.sun.sjcp; public class Commander {	240. Given:
Allswer:	public class commander { 3. public static void main(String[] args) {	1. package com.company.application;
233. DRAG DROP	4. // more code here	2.
	5. }	3. public class MainClass {
Click the Task button.	6. }	4. public static void main(String[] args) {}
 <	Assume that the class file is located in	5. } And MainClass exists in the
 	/foo/com/sun/sjcp/, the current directory is	/apps/com/company/application directory.
Answer:	/foo/, and that	Assume the
	the classpath contains "." (current directory).	CLASSPATH environment variable is set to "."
234. DRAG DROP	Which command line correctly runs	(current directory).
	Commander?	Which two java commands entered at the
Click the Task button.	A. java Commander	command line will run MainClass? (Choose
 	B. java com.sun.sjcp.Commander	two.)
 	C. java com/sun/sjcp/Commander	A. java MainClass if run from the /apps
Answer:	D. java -cp com.sun.sjcp Commander	directory
	E. java -cp com/sun/sjcp Commander	B. java com.company.application.MainClass if
32E Given:	Answer: B	run from the /apps directory
235. Given:	238. Given:	C. java -classpath /apps com.company.application.MainClass if run
5. class Payload {	250. GIVEII.	from any directory
6. private int weight;	11. public static void test(String str) {	D. java -classpath . MainClass if run from the
7. public Payload (int w) { weight = w; }	12. int check = 4;	/apps/com/company/application directory
8. public void setWeight(int w) { weight = w; }	13. if (check = str.length()) {	, There is the interest of the control of the contr
- · · · · · · · · · · · · · · · · · · ·	- ··· ·	

```
E. java -classpath
                                                            10. public float getRange(int x, int y) { return
                                                                                                                        F. new Thread(new Runnable() {
/apps/com/company/application:. MainClass if
                                                            3.14f; } }
                                                                                                                        public void run() { doStuff(); }
run from the /apps directory
                                                                                                                        }).start();
                                                            11.
                                                            12. interface DoAll extends DoMore {
F. java com.company.application.MainClass if
                                                                                                                        Answer: D,F
run from the /apps/com/company/application
                                                            13. float getAvg(int a, int b, int c, int d); }
directory
                                                            What is the result?
                                                                                                                        246. Given:
Answer: B,C
                                                            A. The file will compile without error.
                                                            B. Compilation fails. Only line 7 contains an
                                                                                                                        public class NamedCounter {
241. Given:
                                                            error.
                                                                                                                        private final String name;
                                                            C. Compilation fails. Only line 12 contains an
                                                                                                                        private int count;
3. public class Batman {
                                                            error.
                                                                                                                        public NamedCounter(String name) { this.name
4. int squares = 81;
                                                            D. Compilation fails. Only line 13 contains an
                                                                                                                        = name: }
5. public static void main(String[] args) {
                                                                                                                        public String getName() { return name; }
6. new Batman().go();
                                                            E. Compilation fails. Only lines 7 and 12 contain
                                                                                                                        public void increment() { count++; }
                                                                                                                        public int getCount() { return count; }
7.}
                                                            errors.
8. void go() {
                                                            F. Compilation fails. Only lines 7 and 13 contain
                                                                                                                        public void reset() { count = 0; }
incr(++squares);
10. System.out.println(squares);
                                                            G. Compilation fails. Lines 7, 12, and 13 contain
                                                                                                                        Which three changes should be made to adapt
                                                                                                                        this class to be used safely by multiple
11.}
                                                            errors.
12. void incr(int squares) { squares += 10; }
                                                            Answer: A
                                                                                                                        threads?
13.}
                                                                                                                        (Choose three.)
What is the result?
                                                            244. Given that Triangle implements Runnable,
A. 81
                                                                                                                        A. declare reset() using the synchronized
B. 82
C. 91
                                                            31. void go() throws Exception {
                                                                                                                        keyword
D. 92
                                                            32. Thread t = new Thread(new Triangle());
                                                                                                                        B. declare getName() using the synchronized
E. Compilation fails.
                                                            33. t.start();
                                                                                                                        keyword
F. An exception is thrown at runtime.
                                                            34. for(int x = 1; x < 100000; x++) {
                                                                                                                        C. declare getCount() using the synchronized
Answer: B
                                                            35. //insert code here
                                                                                                                        keyword
                                                            36. if(x%100 == 0) System.out.print("g");
                                                                                                                        D. declare the constructor using the
242. Given a class Repetition:
                                                            37. } }
                                                                                                                        synchronized keyword
                                                            38. public void run() {
                                                                                                                        E. declare increment() using the synchronized
1. package utils;
                                                            39. try {
                                                                                                                        keyword
                                                            40. for(int x = 1; x < 100000; x++) {
                                                                                                                        Answer: A,C,E
                                                            41. // insert the same code here
3. public class Repetition {
4. public static String twice(String s) { return s +
                                                            42. if(x%100 == 0) System.out.print("t");
                                                                                                                        247. Given that t1 is a reference to a live
                                                                                                                        thread, which is true?
                                                            43. }
5. } and given another class Demo:
                                                            44. } catch (Exception e) { }
1. // insert code here
                                                                                                                        A. The Thread.sleep() method can take t1 as an
                                                            Which two statements, inserted independently
3. public class Demo {
                                                            at both lines 35 and 41, tend to allow both
                                                                                                                        B. The Object.notify() method can take t1 as an
4. public static void main(String[] args) {
                                                            threads
                                                                                                                        argument.
System.out.println(twice("pizza"));
                                                            to temporarily pause and allow the other
                                                                                                                        C. The Thread.yield() method can take t1 as an
                                                            thread to execute? (Choose two.)
                                                                                                                        argument.
                                                            A. Thread.wait();
                                                                                                                        D. The Thread.setPriority() method can take t1
Which code should be inserted at line 1 of
                                                            B. Thread.join();
                                                                                                                        as an argument.
Demo.java to compile and run Demo to print
                                                            C. Thread.yield();
                                                                                                                        E. The Object.notify() method arbitrarily
"pizzapizza"?
                                                            D. Thread.sleep(1);
                                                                                                                        chooses which thread to notify.
                                                            E. Thread.notify();
A. import utils.*;
                                                                                                                        Answer: E
B. static import utils.*;
                                                            Answer: C,D
C. import utils.Repetition.*;
                                                                                                                        248. Click the Exhibit button. What is the
D. static import utils.Repetition.*;
                                                            245. Which two code fragments will execute
                                                                                                                        output if the main() method is run?
E. import utils.Repetition.twice();
                                                            the method doStuff() in a separate thread?
F. import static utils.Repetition.twice;
                                                            (Choose two.)
                                                                                                                        <br/>
G. static import utils.Repetition.twice;
                                                                                                                        <img src='./scjp/248.png'></img><br/>
Answer: F
                                                            A. new Thread() {
                                                            public void run() { doStuff(); }
243. Given:
                                                                                                                        B. 5
                                                            B. new Thread() {
                                                                                                                        C. 8
1. interface DoStuff2 {
                                                            public void start() { doStuff(); }
                                                                                                                        D. 9
2. float getRange(int low, int high); }
                                                                                                                        E. Compilation fails.
                                                            C. new Thread() {
                                                                                                                        F. An exception is thrown at runtime.
                                                            public void start() { doStuff(); }
                                                                                                                        G. It is impossible to determine for certain.
4. interface DoMore {
5. float getAvg(int a, int b, int c); }
                                                            }.run();
                                                                                                                        Answer: D
                                                            D. new Thread() {
7. abstract class DoAbstract implements
                                                            public void run() { doStuff(); }
                                                                                                                        249. Given:
DoStuff2, DoMore { }
                                                            }.start();
                                                            E. new Thread(new Runnable() {
                                                                                                                        1. class TestA {
9. class DoStuff implements DoStuff2 {
                                                            public void run() { doStuff(); }
                                                                                                                        2. public void start() {
                                                                                                                        System.out.println("TestA"); }
                                                            }).run();
```

3. }	10. class Nav{	27. class C3 extends C2 {
4. public class TestB extends TestA {	11. public enum Direction { NORTH, SOUTH,	28. public C3() { System.out.println(3); }
5. public void start() {	EAST, WEST }	29. }
System.out.println("TestB"); }	12. }	30. public class Ctest {
6. public static void main(String[] args) {	13. public class Sprite{	31. public static void main(String[] a) { new
7. ((TestA)new TestB()).start();	14. // insert code here	C3(); }
8. }	15. }	32. }
9. }	Which code, inserted at line 14, allows the	What is the result?
What is the result?	Sprite class to compile?	A. 3
write is the result:	A. Direction d = NORTH;	B. 23
A T1A	•	
A. TestA	B. Nav.Direction d = NORTH;	C. 32
B. TestB	C. Direction d = Direction.NORTH;	D. 123
C. Compilation fails.	D. Nav.Direction d = Nav.Direction.NORTH;	E. 321
D. An exception is thrown at runtime.	Answer: D	F. Compilation fails.
Answer: B		G. An exception is thrown at runtime.
	253. Given:	Answer: D
250. Which two code fragments correctly		
create and initialize a static array of int	5. class Atom {	256. Given:
elements? (Choose	6. Atom() { System.out.print("atom "); }	
two.)	7.}	11. public class Rainbow {
,	8. class Rock extends Atom {	12. public enum MyColor {
A. static final int[] a = { 100,200 };	9. Rock(String type) { System.out.print(type); }	13. RED(0xff0000), GREEN(0x00ff00),
B. static final int[] a;	10. }	BLUE(0x0000ff);
static { a=new int[2]; a[0]=100; a[1]=200; }	11. public class Mountain extends Rock {	14. private final int rgb;
C. static final int[] a = new int[2]{ 100,200 };		-
	12. Mountain() {	15. MyColor(int rgb) { this.rgb = rgb; }
D. static final int[] a;	13. super("granite ");	16. public int getRGB() { return rgb; }
static void init() { a = new int[3]; a[0]=100;	14. new Rock("granite ");	17. };
a[1]=200; }	15. }	18. public static void main(String[] args) {
Answer: A,B	<pre>16. public static void main(String[] a) { new</pre>	19. // insert code here
	Mountain(); }	20.}
251. Given:	17. }	21. }
	What is the result?	Which code fragment, inserted at line 19,
11. public abstract class Shape {	A. Compilation fails.	allows the Rainbow class to compile?
12. private int x;	B. atom granite	A. MyColor skyColor = BLUE;
13. private int y;	C. granite granite	B. MyColor treeColor = MyColor.GREEN;
14. public abstract void draw();	D. atom granite granite	C. if(RED.getRGB() < BLUE.getRGB()) { }
15. public void setAnchor(int x, int y) {	E. An exception is thrown at runtime.	D. Compilation fails due to other error(s) in the
		code.
16. this.x = x;	F. atom granite atom granite	
17. this.y = y;	Answer: F	E. MyColor purple = new MyColor(0xff00ff);
18. }	art o	F. MyColor purple = MyColor.BLUE +
19. }	254. Given:	MyColor.RED;
Which two classes use the Shape class		Answer: B
correctly? (Choose two.)	1. public class A {	
A. public class Circle implements Shape {	2. public void doit() {	257. A company that makes Computer Assisted
private int radius;	3. }	Design (CAD) software has, within its
}	4. public String doit() {	application,
B. public abstract class Circle extends Shape {	5. return "a";	some utility classes that are used to perform
private int radius;	6. }	3D rendering tasks. The company's chief
}	7. public double doit(int x) {	scientist
•	8. return 1.0;	has just improved the performance of one of
C. public class Circle extends Shape {	9. }	the utility classes' key rendering algorithms,
private int radius;	10. }	and has
public void draw();	What is the result?	assigned a programmer to replace the old
public void draw(),	A. An exception is thrown at runtime.	
) Doministrativa et alexa Cinale incelence esta	•	algorithm with the new algorithm. When the
D. public abstract class Circle implements	B. Compilation fails because of an error in line	programmer begins researching the utility
Shape {	7.	classes, she is happy to discover that the
private int radius;	C. Compilation fails because of an error in line	algorithm to
public void draw();	4.	be replaced exists in only one class. The
}	 D. Compilation succeeds and no runtime errors 	programmer reviews that class's API, and
E. public class Circle extends Shape {	with class A occur.	replaces the
private int radius;	Answer: C	old algorithm with the new algorithm, being
public void draw() {/* code here */}		careful that her changes adhere strictly to the
F. public abstract class Circle implements	255. Given:	class's
Shape {		API. Once testing has begun, the programmer
private int radius;	21. abstract class C1 {	discovers that other classes that use the class
public void draw() { /* code here */ }	22. public C1() { System.out.print(1); }	she
Answer: B,E	23. }	changed are no longer working properly. What
, mower, by	24. class C2 extends C1 {	
252 Given:	•	design flaw is most likely the cause of these
252. Given:	25. public C2() { System.out.print(2); }	new
	26. }	bugs?

```
C. An exception is thrown at runtime.
A. Inheritance
                                                            D. Compilation fails because of an error in line
                                                                                                                        11. public void someMethod(Object value) {
B. Tight coupling
                                                                                                                        12. // check for null value ...
                                                            E. Compilation fails because of an error in line
C. Low cohesion
                                                                                                                        20. System.out.println(value.getClass());
D. High cohesion
                                                            F. Compilation fails because of an error in line
E. Loose coupling
                                                                                                                        What, inserted at line 12, is the appropriate
F. Object immutability
                                                            31.
                                                                                                                        way to handle a null value?
Answer: B
                                                            Answer: E
                                                                                                                        A. assert value == null;
258. Given:
                                                            261. Given:
                                                                                                                        B. assert value != null, "value is null";
                                                                                                                        C. if (value == null) {
11. abstract class Vehicle { public int speed() {
                                                            3. class Employee {
                                                                                                                        throw new AssertionException("value is null");
                                                            4. String name; double baseSalary;
12. class Car extends Vehicle { public int
                                                            5. Employee(String name, double baseSalary) {
                                                                                                                        D. if (value == null) {
speed() { return 60; }
                                                                                                                        throw new IllegalArgumentException("value is
                                                            6. this.name = name;
13. class RaceCar extends Car { public int
                                                            this.baseSalary = baseSalary;
                                                                                                                        null");
speed() { return 150; } ...
21. RaceCar racer = new RaceCar();
                                                                                                                        Answer: D
                                                            9. }
22. Car car = new RaceCar();
                                                            10. public class SalesPerson extends Employee
23. Vehicle vehicle = new RaceCar();
                                                                                                                        264. Given:
24. System.out.println(racer.speed() + ", " +
                                                            11. double commission;
                                                                                                                        11. public static void main(String[] args) {
                                                            12. public SalesPerson(String name, double
car.speed()
25. + ", " + vehicle.speed());
                                                            baseSalary, double commission) {
                                                                                                                        12. try {
What is the result?
                                                                                                                        13. args = null;
                                                            13. // insert code here
                                                                                                                        14. args[0] = "test";
A. 0, 0, 0
                                                            14. }
B. 150, 60, 0
                                                                                                                        15. System.out.println(args[0]);
                                                            15.}
                                                            Which two code fragments, inserted
C. Compilation fails.
                                                                                                                        16. } catch (Exception ex) {
D. 150, 150, 150
                                                            independently at line 13, will compile? (Choose
                                                                                                                        17. System.out.println("Exception");
E. An exception is thrown at runtime.
                                                                                                                        18. } catch (NullPointerException npe) {
Answer: D
                                                            A. super(name, baseSalary);
                                                            B. this.commission = commission;
                                                                                                                        System.out.println("NullPointerException");
259. Given:
                                                                                                                        20. }
                                                            C. super():
                                                            this.commission = commission;
                                                                                                                        21.}
                                                            D. this.commission = commission;
                                                                                                                        What is the result?
11. class Mammal { }
                                                            super();
                                                                                                                        A. test
12.
13. class Raccoon extends Mammal {
                                                            E. super(name, baseSalary);
                                                                                                                        B. Exception
14. Mammal m = new Mammal();
                                                            this.commission = commission;
                                                                                                                        C. Compilation fails.
                                                            F. this.commission = commission;
                                                                                                                        D. NullPointerException
15.}
                                                            super(name, baseSalary);
                                                                                                                        Answer: C
16.
17. class BabyRaccoon extends Mammal { }
                                                            G. super(name, baseSalary, commission);
Which four statements are true? (Choose
                                                            Answer: A,E
                                                                                                                        265. Given:
A. Raccoon is-a Mammal.
                                                            262. Given:
                                                                                                                        11. public static Iterator reverse(List list) {
B. Raccoon has-a Mammal.
                                                                                                                        12. Collections.reverse(list);
C. BabyRaccoon is-a Mammal.
                                                            11. class A {
                                                                                                                        13. return list.iterator();
                                                            12. public void process() {
D. BabyRaccoon is-a Raccoon.
                                                                                                                        14.}
E. BabyRaccoon has-a Mammal.
                                                            System.out.print("A,"); }
                                                                                                                        15. public static void main(String[] args) {
F. BabyRaccoon is-a BabyRaccoon.
                                                            13. class B extends A {
                                                                                                                        16. List list = new ArrayList();
                                                            14. public void process() throws IOException {
                                                                                                                        17. list.add("1"); list.add("2"); list.add("3");
Answer: A,B,C,F
                                                            15. super.process();
                                                                                                                        18. for (Object obj: reverse(list))
260. Given:
                                                            16. System.out.print("B,");
                                                                                                                        19. System.out.print(obj + ", ");
                                                            17. throw new IOException();
                                                                                                                        20.}
10. public class SuperCalc {
                                                                                                                        What is the result?
11. protected static int multiply(int a, int b) {
                                                            19. public static void main(String[] args) {
                                                                                                                        A. 3, 2, 1,
return a * b;}
                                                            20. try { new B().process(); }
                                                                                                                        B. 1. 2. 3.
12.}
                                                            21. catch (IOException e) {
                                                                                                                        C. Compilation fails.
                                                            System.out.println("Exception"); }
                                                                                                                        D. The code runs with no output.
20. public class SubCalc extends SuperCalc{
                                                            22.}
                                                                                                                        E. An exception is thrown at runtime.
21. public static int multiply(int a, int b) {
                                                            What is the result?
                                                                                                                        Answer: C
22. int c = super.multiply(a, b);
                                                            A. Exception
                                                            B. A,B,Exception
                                                                                                                        266. Given:
23. return c;
                                                            C. Compilation fails because of an error in line
24. }
                                                                                                                        11. public class Test {
25.}
                                                            D. Compilation fails because of an error in line
                                                                                                                        12. public static void main(String [] args) {
30. SubCalc sc = new SubCalc ();
                                                                                                                        13. int x = 5;
31. System.out.println(sc.multiply(3,4));
                                                            E. A NullPointerException is thrown at runtime.
                                                                                                                        14. boolean b1 = true;
32. System.out.println(SubCalc.multiply(2,2));
                                                            Answer: D
                                                                                                                        15. boolean b2 = false;
What is the result?
A. 12
                                                            263. Given a method that must ensure that its
                                                                                                                        17. if ((x == 4) \&\& !b2)
B. The code runs with no output.
                                                            parameter is not null:
                                                                                                                        18. System.out.print("1");
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19. System.out.print("2");
                                                                                                                       2. import java.util.*;
                                                           20.}
20. if ((b2 = true) && b1)
                                                           What is the result?
                                                                                                                       3. public class GetInLine {
                                                           A. A, B, C,
21. System.out.print("3");
                                                                                                                       4. public static void main(String[] args) {
22.}
                                                           B. B, C, A,
                                                                                                                       5. PriorityQueue<String> pq = new
23.}
                                                           C. Compilation fails.
                                                                                                                       PriorityQueue<String>();
What is the result?
                                                           D. The code runs with no output.
                                                                                                                       pq.add("banana");
A. 2
                                                           E. An exception is thrown at runtime.
                                                                                                                       7. pq.add("pear");
B. 3
                                                           Answer: B
                                                                                                                       8. pq.add("apple");
                                                                                                                       9. System.out.println(pq.poll() + " " +
C. 12
D. 23
                                                           270. Given:
                                                                                                                       pq.peek());
E. 123
                                                                                                                       10.}
F. Compilation fails.
                                                           11. public void testIfA() {
                                                                                                                       11.}
G. An exception is thrown at runtime.
                                                           12. if (testIfB("True")) {
                                                                                                                       What is the result?
Answer: D
                                                           13. System.out.println("True");
                                                                                                                       A. apple pear
                                                           14. } else {
                                                                                                                       B. banana pear
267. Given:
                                                           15. System.out.println("Not true");
                                                                                                                       C. apple apple
                                                                                                                       D. apple banana
                                                           16. }
11. class X { public void foo() {
                                                           17.}
                                                                                                                       E. banana banana
System.out.print("X "); } }
                                                           18. public Boolean testIfB(String str) {
                                                                                                                       Answer: D
                                                           19. return Boolean.valueOf(str);
13. public class SubB extends X {
                                                           20. }
                                                                                                                       274. Given:
14. public void foo() throws RuntimeException
                                                            What is the result when method testIfA is
                                                           invoked?
                                                                                                                       11. public class Person {
15. super.foo();
                                                           A. True
                                                                                                                       12. private String name, comment;
16. if (true) throw new RuntimeException();
                                                           B. Not true
                                                                                                                       13. private int age;
                                                           C. An exception is thrown at runtime.
17. System.out.print("B");
                                                                                                                       14. public Person(String n, int a, String c) {
                                                            D. Compilation fails because of an error at line
                                                                                                                       15. name = n; age = a; comment = c;
19. public static void main(String[] args) {
                                                                                                                       16. }
20. new SubB().foo();
                                                           E. Compilation fails because of an error at line
                                                                                                                       17. public boolean equals(Object o) {
                                                                                                                       18. if (! (o instanceof Person)) return false;
21.}
22.}
                                                           Answer: A
                                                                                                                       19, Person p = (Person)o;
What is the result?
                                                                                                                       20. return age == p.age &&
A. X, followed by an Exception.
                                                           271. Click the Exhibit button. Given: ClassA a =
                                                                                                                       name.equals(p.name);
                                                           new ClassA(); a.methodA(); What is the result?
B. No output, and an Exception is thrown.
                                                                                                                       21.}
C. Compilation fails due to an error on line 14.
                                                                                                                       22.}
                                                                                                                       What is the appropriate definition of the
D. Compilation fails due to an error on line 16.
E. Compilation fails due to an error on line 17.
                                                            <img src='./scjp/271.png'></img><br/>
                                                                                                                       hashCode method in class Person?
                                                                                                                       A. return super.hashCode();
F. X, followed by an Exception, followed by B.
Answer: A
                                                           A. Compilation fails.
                                                                                                                       B. return name.hashCode() + age * 7;
                                                           B. ClassC is displayed.
                                                                                                                       C. return name.hashCode() +
268. Given:
                                                           C. The code runs with no output.
                                                                                                                       comment.hashCode() / 2;
                                                            D. An exception is thrown at runtime.
                                                                                                                       D. return name.hashCode() +
1. public class Mule {
                                                                                                                       comment.hashCode() / 2 - age * 3;
                                                            Answer: D
2. public static void main(String[] args) {
                                                                                                                       Answer: B
                                                           272. Click the Exhibit button.
3. boolean assert = true;
4. if(assert) {
                                                           Given:
                                                                                                                       275. A programmer must create a generic class
System.out.println("assert is true");
                                                            <br/>
                                                                                                                       MinMax and the type parameter of MinMax
                                                            <img src='./scjp/272.png'></img><br/>
                                                                                                                       must
6. }
                                                                                                                       implement Comparable. Which
7.}
                                                           31. public void method() {
                                                                                                                       implementation of MinMax will compile?
Which command-line invocations will compile?
                                                           32. A a = \text{new A()};
                                                           33. a.method1():
                                                                                                                       A. class MinMax<E extends Comparable<E>> {
A. javac Mule.java
                                                                                                                       E min = null;
                                                            Which statement is true if a TestException is
B. javac -source 1.3 Mule.java
                                                                                                                       E max = null;
C. javac -source 1.4 Mule.java
                                                           thrown on line 3 of class B?
                                                                                                                       public MinMax() {}
D. javac -source 1.5 Mule.java
                                                           A. Line 33 must be called within a try block.
                                                                                                                       public void put(E value) { /* store min or max
Answer: B
                                                           B. The exception thrown by method1 in class A
                                                                                                                       B. class MinMax<E implements
                                                           is not required to be caught.
269. Given:
                                                           C. The method declared on line 31 must be
                                                                                                                       Comparable<E>> {
                                                           declared to throw a RuntimeException.
                                                                                                                       E min = null;
11. public static Collection get() {
                                                           D. On line 5 of class A, the call to method2 of
                                                                                                                       E max = null;
12. Collection sorted = new LinkedList();
                                                           class B does not need to be placed in a
                                                                                                                       public MinMax() {}
13. sorted.add("B"); sorted.add("C");
                                                                                                                       public void put(E value) { /* store min or max
                                                           try/catch
sorted.add("A");
                                                           block.
                                                           Answer: B
                                                                                                                       C. class MinMax<E extends Comparable<E>> {
14. return sorted;
                                                                                                                       <E> E min = null;
16. public static void main(String[] args) {
                                                           273. Given that the elements of a
                                                                                                                       <E> E max = null;
17. for (Object obj: get()) {
                                                           PriorityQueue are ordered according to natural
                                                                                                                       public MinMax() {}
18. System.out.print(obj + ", ");
                                                           ordering, and:
                                                                                                                       public <E> void put(E value) { /* store min or
```

```
D. class MinMax<E implements
                                                           D. When you plan to reuse the StringBuffer to
Comparable<E>> {
                                                           build more than one string.
                                                                                                                       282
<E> E min = null;
                                                           Answer: A,B
<E> E max = null;
                                                                                                                       Given:
public MinMax() {}
                                                           279
public <E> void put(E value) { /* store min or
                                                                                                                       1. public class BuildStuff {
max */ }
                                                           Given:
                                                                                                                       2. public static void main(String[] args) {
Answer: A
                                                                                                                       Boolean test = new Boolean(true);
                                                           1. public class LineUp {
                                                                                                                       4. Integer x = 343;
276. Given:
                                                           2. public static void main(String[] args) {
                                                                                                                       Integer y = new BuildStuff().go(test, x);
                                                           3. double d = 12.345;
                                                                                                                       System.out.println(y);
import java.util.*;
                                                           4. // insert code here
                                                                                                                      7.}
public class G1 {
                                                           5. }
                                                                                                                       8. int go(Boolean b, int i) {
public void takeList(List<? extends String> list)
                                                           6.}
                                                                                                                       9. if(b) return (i/7);
                                                           Which code fragment, inserted at line 4,
                                                                                                                       10. return (i/49);
// insert code here
                                                           produces the output | 12.345|?
                                                                                                                       11.}
                                                           A. System.out.printf("|%7d| \n", d);
                                                                                                                       12.}
                                                           B. System.out.printf("|%7f| \n", d);
                                                                                                                      What is the result?
                                                           C. System.out.printf("|%3.7d| \n", d);
Which three code fragments, inserted
                                                                                                                      A. 7
independently at line 6, will compile? (Choose
                                                           D. System.out.printf("|%3.7f| \n", d);
                                                                                                                      B. 49
three.)
                                                           E. System.out.printf("|%7.3d| \n", d);
                                                                                                                       C. 343
A. list.add("foo");
                                                           F. System.out.printf("|%7.3f| \n", d);
                                                                                                                       D. Compilation fails.
B. Object o = list;
                                                           Answer: F
                                                                                                                       E. An exception is thrown at runtime.
                                                                                                                       Answer: B
C. String s = list.get(0);
D. list = new ArrayList<String>();
                                                           280
E. list = new ArrayList<Object>();
                                                                                                                       283. DRAG DROP
                                                           Given that the current directory is empty, and
Answer: B,C,D
                                                           that the user has read and write privileges to
                                                                                                                       Click the Task button.
                                                                                                                       <br/>
277. Given:
                                                           current directory, and the following:
                                                                                                                       <img src='./scjp/283.png'></img><br/>
1. public class Drink implements Comparable {
                                                           1. import java.io.*;
                                                                                                                       Answer:
2. public String name;
                                                           2. public class Maker {
3. public int compareTo(Object o) {
                                                           3. public static void main(String[] args) {
                                                                                                                      284. DRAG DROP
                                                           File dir = new File("dir");
4. return 0;
                                                           5. File f = new File(dir, "f");
5.}
                                                                                                                       Click the Task button.
6.}
                                                           6.}
                                                                                                                       <br/>
                                                                                                                       <img src='./scjp/284.png'></img><br/>
and:
                                                           7.}
20. Drink one = new Drink();
                                                           Which statement is true?
21. Drink two = new Drink();
                                                           A. Compilation fails.
                                                                                                                       Answer:
                                                           B. Nothing is added to the file system.
22. one.name= "Coffee";
23. two.name= "Tea";
                                                           C. Only a new file is created on the file system.
                                                                                                                       285. DRAG DROP
24. TreeSet set = new TreeSet();
                                                           D. Only a new directory is created on the file
25. set.add(one);
                                                                                                                       Click the Task button.
26. set.add(two);
                                                           E. Both a new file and a new directory are
                                                                                                                       <hr/>
A programmer iterates over the TreeSet and
                                                           created on the file system.
                                                                                                                       <img src='./scjp/285.png'></img><br/>
prints the name of each Drink object. What is
                                                           Answer: B
the
                                                                                                                       Answer:
result?
                                                           281
                                                                                                                       286. DRAG DROP
A. Tea
B. Coffee
                                                           Given:
                                                                                                                      Click the Task button.
C. Coffee
                                                                                                                       <br/>
                                                           1. d is a valid, non-null Date object
                                                                                                                       <img src='./scjp/286.png'></img><br/>
D. Compilation fails.
                                                           2. df is a valid, non-null DateFormat object set
                                                                                                                       Answer:
E. The code runs with no output.
                                                           to the current locale What outputs the current
F. An exception is thrown at runtime.
                                                           locale's country name and the appropriate
                                                                                                                       287. DRAG DROP
                                                           version of d's date?
                                                           A. Locale loc = Locale.getLocale();
                                                                                                                       Click the Task button.
278. Which two scenarios are NOT safe to
                                                           System.out.println(loc.getDisplayCountry()
                                                                                                                       <br/>
replace a StringBuffer object with a
                                                           + " " + df.format(d));
                                                                                                                       <img src='./scjp/287.png'></img><br/>
                                                           B. Locale loc = Locale.getDefault();
StringBuilder object?
                                                           System.out.println(loc.getDisplayCountry()
   (Choose two.)
                                                                                                                       Answer:
                                                           + " " + df.format(d));
                                                           C. Locale loc = Locale.getLocale();
                                                                                                                       288. DRAG DROP
A. When using versions of Java technology
                                                           System.out.println(loc.getDisplayCountry()
earlier than 5.0.
B. When sharing a StringBuffer among multiple
                                                           + " " + df.setDateFormat(d));
                                                                                                                       Click the Task button.
                                                           D. Locale loc = Locale.getDefault();
                                                                                                                       <br/>
C. When using the java.io class
                                                                                                                       <img src='./scjp/288.png'></img><br/>
                                                           System.out.println(loc.getDisplayCountry()
StringBufferInputStream.
                                                           + " " + df.setDateFormat(d));
                                                           Answer: B
                                                                                                                       Answer:
```

289. DRAG DROP

Click the Task button.

Answer:

290. DRAG DROP

Click the Task button.

Answer:

