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| **Skill 20.1 Exercise 1** | |
| 1. What does it mean to overload a method or constructor? | |
| 1. What is the purpose of overloading in Java? | |
| 1. Does the class shown to the right illustrate overloading? Explain. | public MyClass{  String a;  MyClass(int a){  this.a = String.valueOf(a);  }  MyClass(double a){    this.a = String.valueOf(a);  }  MyClass(boolean a){  this.a = String.valueOf(a);  }  } |

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| **Skill 20.2 Exercise 1** |
| class MyClass {  int height;  MyClass() {  System.out.println("bricks");  height = 0;  }  MyClass(int i) {  System.out.println("Building a new House that is " + i + " feet tall");  height = i;  }  } |
| Refer to the MyClass class above. What is printed when the following is code is executed from the main method of the driver class?   1. MyClass t = new MyClass(0); 2. new MyClass(); |

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| **Skill 20.02 Exercise 2** |
| Consider the following class definition. Each object of the class Item will store the item’s name as itemName, the item’s regular price, in dollars, as regPrice, and the discount that is applied to the regular price when the item is on sale as discountPercent. For example, a discount of 15% is stored in discountPercent as 0.15.  public class Item  {  private String itemName;  private double regPrice;  private double discountPercent;  public Item (String name, double price, double discount)  {  itemName = name;  regPrice = price;  discountPercent = discount;  }  public Item (String name, double price)  {  itemName = name;  regPrice = price;  discountPercent = 0.25;  }  /\* Other methods not shown \*/  }  Which of the following code segments, found in a class other than Item, can be used to create an item with a regular price of $10 and a discount of 25% ?   1. Item b = new Item("blanket", 10.0, 0.25); 2. Item b = new Item("blanket", 10.0); 3. Item b = new Item("blanket", 0.25, 10.0); |

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| **Skill 20.3: Exercise 1** | |
| public class Main  {  public static void main(String[] args)  {  double yz = methodF();  }  public static double methodF()  {  double d = 3.14;  return d;  }  public static double sv = 99;  public int i = 7;  } | Consider the following calls in the main method. For each of the following indicate whether the statement is legal or illegal   1. double yz = sv; 2. int xyz = i 3. System.out.println(methodF()/sv); 4. System.out.println(yz/i); |