

Fall Semester				
HW Set	Topic	Reading	Keywords / Concepts	Programs
0	JCreator shortcuts	-	Ctrl-Shift-N (new project) Ctrl-N (new java file) F7 (compile project) F5 (run project) Ctrl-M (comment code) Ctrl-Shift-M (uncomment code)	Install Java SDK Install JCreator
1	Intro	Chapter 1	public static void main (String[ ] args) int, String, = System.out.println for / while if / if-else <, >, == Arrays Math.random()	P1A MySecondApp P1B NumTest P1C ForLoopy P1D Favorites P1E RandomInts P1F PosNeg
2	Objects	Chapter 2	superclass / subclass Class object / class object driver new "dot" operator Math.random()	P2A Clock P2B Teacher P2C Fraction P2D MyPod
3	Variables	Chapter 3	Primitive types (int, double, boolean) Reserved keywords Primitive variable vs. reference variable Garbage collection Arrays "Dot" operator	P3A OutOfBounds P3B Television P3C TelevisionStore P3D LargestInt
4	Object Behavior	Chapter 4	Method arguments and parameters Returning values from a method Pass by value Private and public Getters and setters Comparing variables vs. comparing references	P4A Stopwatch P4B StudentGPA P4C LetterGrade P4D AP 044 (Robot)
5	Methods	Chapter 5	High level design / Unit testing Enhanced for loop Casting primitives Math.random() Integer.parseInt Keyword "break" Increment operator ++	P5A EvenIntegers P5B CountOdd P5C SumOfDigits P5D CastIntegers
6	Java API (ArrayList)	Chapter 6	ArrayList vs. Array Object within other object (Object composition) Boolean operators and expressions Java API	P6A RandomArray P6B RandomArrayList P6C ArrayofStrings P6D RemoveSmallFor P6E ArrayListSearch P6F ArrayStringRemoval P6G ArrayListInsert P6H AP 041 (WordList)
7	Inheritance	Chapter 7	"extends" keyword Overriding vs. Overloading methods Object composition Method call order P.175 "super" keyword Object Composition Polymorphism	P7A Alligators P7B Alligators2D P7C Television P7D Clock (DayLightSavings) P7E AP Sample 2 (LineEditor)
8	Abstract classes Interfaces Polymorphism	Chapter 8	Concrete vs. abstract classes Abstract class and abstract methods Class Object (equals(), getClass(), hashCode(), toString() ) Deadly Diamond of Death (Multiple Inheritance) Interfaces "super" keyword	P8A SuperHero (abstract class) P8B Student (abstract class) P8C AnalogDigital (interface, super) P8D AP Sample 1 (Ballot)
9	Constructors	Chapter 9	Stack and Heap Local variables vs. instance variables Constructors (no arg constructor, overloading constructors) Life and scope of a variable "Killing" objects	P9A AlligatorConstructor P9B ClockConstructor P9C SuperHeroConstructor P9D StudentConstructor P9E AnalogDigitalConstructor P9F AP 042 (Pet) P9G AP 052 (Ticket)
10	Static classes, methods, and variables	Chapter 10	Static methods Static variables "final" keyword (final class, final method, final variable) Math class methods Wrapper classes Autoboxing / autounboxing Number formatting	P10A MyPod with serial number (static, final) P10B Autoboxing P10C TimeArrays P10D AP 062 (Item) P10E AP Sample 3 (Account)