**Chapter 5 – Answers**

**5.7 Values of x:**

a) 7.5  
b) 7.0  
c) 0.0  
d) 0.0  
e) 6.4  
f) -6.0  
g) -9.0

**5.12 Random integers for variable n:**

a) n = 1 + rand.nextInt(2);  
b) n = 1 + rand.nextInt(100);  
c) n = rand.nextInt(10);  
d) n = 1000 + rand.nextInt(113);  
e) n = -1 + rand.nextInt(3);  
f) n = -3 + rand.nextInt(15);

**5.13 Random numbers from sets:**

a) n = 2 + 2 \* rand.nextInt(5); // 2, 4, 6, 8, 10  
b) n = 3 + 2 \* rand.nextInt(5); // 3, 5, 7, 9, 11  
c) n = 6 + 4 \* rand.nextInt(5); // 6, 10, 14, 18, 22

**5.21 Separating Digits:**

a) int quotient = a / b;  
b) int remainder = a % b;  
c)

void displayDigits(int number) {

String numStr = Integer.toString(number);

for (int i = 0; i < numStr.length(); i++) {

System.out.print(numStr.charAt(i) + " ");

}

}

**5.33 Craps with Wager:**

* Initialize bankBalance = 1000
* Prompt for wager: if wager > bankBalance, ask again
* If win: bankBalance += wager
* If lose: bankBalance -= wager
* If bankBalance == 0, print “Sorry. You busted!”
* Add chatter with random responses using a method like displayChatter()

**5.35–5.39 Computer-Assisted Instruction:**

**5.35**: Prompt multiplication question with random one-digit numbers, repeat if wrong.  
**5.36**: Use random response from a set for correct/incorrect answers.  
**5.37**: Track 10 answers, show % score