

Logic-1 Quiz

<http://codingbat.com/home/srp4379@lausd.net/quiz3>

1. gotAdvisory, Hint: 3 squirrelPlay
2. diceDoublesOrLucky7, Hint: *24 withoutDoubles*, Any of the problems from *09 specialEleven* thru *13 nearTen*
3. digitsEqualOrTwice, Hint: 16 teaParty, 22 lastDigit, 29 shareDigit
4. consecutiveOrder, Hint: 20 inOrder, 21 inOrderEqual,
HINT: Note that the numbers must not only be IN ORDER, but each number must be exactly 1 more than the previous number. For an inorder sequence like 4 8 11, $4 < 8$ && $8 < 11$. This is also true for a consecutive sequence like 3 4 5: $3 < 4$ && $4 < 5$. HOWEVER, for the consecutive sequence this ALSO must be true: $3 + 1 == 4$ && $4 + 1 == 5$
5. **oddSum**, Hint: 5 sortaSum, Logic-1 Basics boolean **isEvenNumber**
6. **bothEvenOrBothOdd**, Hint: Logic-1 Basics boolean **isEvenNumber**, **isDivisibleBy3and5 !!**
7. divisibleBy5, Hint: Logic-1 Basics **isDivisibleBy3**
8. largestOf3

```
int a = 15;      int largestAB = Math.max(a, b);
int b = 10;      = 15

int c = 25;      int largestABC = Math.max(largestAB, c);
                = 25

int d = 20;      int largestABCD = Math.max(largestABC, d);
                = 25
```

9. subjectNow

10. middleOf3

HINT: There are two possible solutions:

#1:

If you have three numbers: **n1 n2** and **n3**,

if **n1** is the middle number, then it can be in the middle in 2 ways:

n2 <= **n1** && **n1** <= **n3** (**n2** is low and **n3** is high)

OR **n3** <= **n1** && **n1** <= **n2** (**n3** is low and **n2** is high)

#2:

You already know how to find the **largest** of 3 numbers using **Math.max()**.

You can find the **smallest** of 3 numbers using **Math.min()**.

Consider that the **total** of the 3 numbers is the sum: **n1 + n2 + n3**

Note that the **largest + smallest + middle** must ALSO total to that same sum.

Therefore the **middle value** must be equal to the **total - (largest + smallest)!**