

Place Value - Integers

- 1) Write nine million, thirty seven thousand, two hundred and sixty two in digits.
- 2) Write 56,040,700,098 in words.
- 3) Which is bigger?
23,098,005 or 4 billion?
- 4) You have 5 tiles that contain the digits; 4, 5, 6, 8, 9
 - a) You use all these tiles to make the largest possible 5-digit integer. What is it?
 - b) You use all these tiles to make the smallest possible 5-digit integer. What is it?
 - c) Use all these tiles to make two numbers with the smallest difference between them. What are they?
- 5) Increase 28,479 by two hundreds.
- 6) Increase 58,167 by five thousands.
- 7) Below are a set of clues along with 8 possible numbers. Figure out which is it.
 - It is greater than 3 million
 - It is less than $3\frac{1}{2}$ million
 - The largest digit in the number is the ten thousands digit
 - It is a multiple of 5

3,247,180	2,853,918	3,892,100	4,235,105
3,072,130	3,584,325	30,291,300	4,138,282

- 8) Below are a set of clues along with 8 possible numbers. Figure out which is it.
 - It is an eight digit number
 - Its largest digit is the hundred thousands digit
 - It is not divisible by 5
 - If you double it, the result is less than 24 million

22,165,341	10,923,510	12,632,114	8,942,327
11,655,125	7,855,927	10,376,418	11,534,342

- 9) You have 7 tiles that contain the digits; 0,1,2,5,6,7 and 9
- a) Write down all of the numbers you can make using all the tiles that lie between 2,510,000 and 2,511,000
- b) Use the largest of your numbers from part a)
Swap any two digits once only to make the largest number possible
- c) Make a new number by using all the tiles that is the closest to 4,900,000
- d) Use all seven tiles to make the largest number possible
- e) Use all seven tiles to make the smallest number possible
We can swap digits just like in b)
What is the smallest number of swaps you **need** to turn this number into your answer to d)
- f) You can make any seven digit number using all the tiles
What is the maximum number of swaps you would ever **need** to do in order to turn it into the largest number from part d) ?
- 10) I listed ten consecutive integers, but then lost one of them. Oops.
The remaining nine integers sum to 2012.
What number did I lose?

Answers

- 1) 9,037,262 2) Fifty six billion, forty million, seven hundred thousand and ninety eight
3) 4 billion 4a) 98654 b) 45689 c) 456 and 98 5) 28679 6) 63167 7) 3,072,130
8) 11,534,342 9a) all in the form 2,510,___ and end with 679, 697, 769, 796, 967, 976
b) 9,510,276 c) 5,012,679 d) 9,765,210 e) 4 f) 6 – can you tell me why? 10) 223