



## Where in the World is Carmen Sandiego Mission



Your mission today is to track down Carmen Sandiego. We have received a tip that she has been spotted at a destination in each time zone. It is our task to find out each place she has been to and collect the clues left at each time zone (integer). This will allow us to determine her final destination and our mission will be complete!

In order to find our clues, we will be using our knowledge of the number line, opposite integers, adding integers, and subtracting integers.

Before we can begin our mission, we must complete our training in order to become daring detectives.

- 1) First task of training - We must use our team building skills. Each of you has been given a city in the world. This city has a corresponding integer. With these integers, we must create a human number line.
- 2) Second task of training - Once we have made our number line. We each must know the opposite integer of the integer we have been given.
- 3) Third task of training - Review the steps of adding integers.
- 4) Fourth task of training - Review the steps of subtracting integers.

Now that we have completed our training, our next step is to answer the questions in each section. The answers will give us the clues we need in order to determine her final destination. Once you have completed all of your questions, you must go to the secret headquarters and ask for the code to crack all of the clues.

The only way to receive the code is to have shown all of your work for the questions. The reason for this is we might have to retrace our steps if we made an error on our mission.

**GOOD LUCK ON YOUR MISSION!!**

**Section 1 of your Mission:**

Draw a number line below ranging from -12 to +12

- 1) What is the opposite integer of -3? What city is this answer?  
Answer= +3 The first city she is at is Moscow
- 2) What is the opposite integer of +8? What city is this answer?
- 3) What is the opposite integer of -12? What city is this answer?
- 4) Which integer is neutral? What city is this answer?
- 5) Which integer is represented by the sentence: 5 degrees below 0? What city is this answer?
- 6) Which integer is represented by the sentence: 10 degrees above sea level? What city is this answer?
- 7) Which integer is represented by the sentence: 3 strokes under par? What city is this answer?

**Section 2 of your Mission:**

For the following questions, which integer is greater?

- 8) -5 and -2 What city is this answer?
- 9) -8 and -10 What city is this answer?

10)  $0$  and  $+6$     What city is this answer?

11)  $-2$  and  $-3$     What city is this answer?

For the following questions, which integer is less?

12)  $-8$  and  $-4$     What city is this answer?

13)  $+10$  and  $+11$     What city is this answer?

14)  $-6$  and  $-7$     What city is this answer?

**Section 3 of your Mission:**

For the following questions please add the two integers given. Use a number line or algebra tiles to help you.

15)  $+8 + -11$     What city is this answer?

16)  $-9 + 4$     What city is this answer?

17)  $+11 + -10$     What city is this answer?

18)  $-3 + -7$     What city is this answer?

19)  $0 + 3$     What city is this answer?

20)  $-9 + 1$     What city is this answer?

21)  $-2 + 11$     What city is this answer?

**Section 4 of your Mission:**

For the following questions please subtract the integers. Show your work!

22)  $0 - (+3)$       What city is this answer?  
 $0 - (-3)$   
 $0 + (-3)$   
 $= -3$       She is now in Rio de Janeiro

23)  $-4 - (+7)$       What city is this answer?

24)  $2 - (+12)$       What city is this answer?

25)  $3 - (-9)$       What answer is this city?

26)  $-1 - (-11)$       What answer is this city?

27)  $-7 - (-4)$       What answer is this city?

28)  $0 - (8)$       What answer is this city?

Here is your guide to help you determine which city she is at for each corresponding integer.

Pago Pago	-11	Rome	1
Honolulu	-10	Athens	2
Anchorage	-9	Moscow	3
Vancouver	-8	Muscat	4
Calgary	-7	Perm	5
Winnipeg	-6	Omsk	6
Toronto	-5	Jakarta	7
Georgetown	-4	Beijing	8
Rio de Janeiro	-3	Tokyo	9
Recife	-2	Sydney	10
Azores	-1	Noumea	11
London	0	Auckland	12

Here is your decoding guide to determine her final destination.

A = -8	N = +10
B = +2	O = -10
C = +3	P = +5
D = -7	Q = -9
E = -5	R = +12
F = -11	S = -2
G = +1	T = +6
H = -4	U = +8
I = -3	V = -12
J = +7	W = +4
K = -6	X = -1
L = +9	Y = +11
M = 0	Z = N/A

Place each corresponding letter to the matching answer below.

  C    
 1    2    3    4    5    6                    7    8                    9    10

                                                                                            

11    12    13                                    14    15    16    17    18

                                                                                                

19    20    21    22    23    24    25    26    27    28