

## Integers by the Sea

Today you are going to explore the Integer Ocean through the wonderful world of subtraction. Please follow the instructions below to create your very own Integer Ocean, then answer the questions.

1. Label a number line along the edge of the paper in increments of 10 feet.
2. Draw a cliff that rises to 50 feet above sea level.
3. Draw an airplane flying at 120 feet over the surface of the water.
4. Draw a submarine on the floor of the sea.
5. Draw a cliff diver, having dove off the cliff, 20 feet from the water.
6. Draw a giant squid 80 feet below the surface of the water.
7. Draw a deep sea diver at the end of her 60-foot air hose (below sea level of course).
8. Draw a shark cruising 20 feet below the surface.
9. Draw a seagull flying 10 feet above the surface of the water.
10. Draw a starfish at the base of the cliff.
11. Draw a sailboat on the surface of the water.
12. Draw a whale sleeping at a depth of 60 feet.

Answer the following questions about your picture. Remember, you are finding the “difference between” two objects. Use the heights/depths given to write an equation, then solve your equation.

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| 1. How far is it between the whale and the cliff diver?                     | 2. How far would the giant squid have to swim to eat the starfish?                       |
| 3. How far must the seagull drive in order to land on the sailboat?         | 4. How far would the airplane have to descend so that it could land on top of the cliff? |
| 5. How far has the cliff diver fallen if he dove from the top of the cliff? | 6. How far must the deep sea diver swim to get to the submarine?                         |

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| 7. How far has the skydiver fallen from the airplane?  | 8. What is the difference in height of the cliff diver and the sky diver?  |
| 9. If the skydiver landed on the sailboat, put on her scuba gear, and swam down to swim with the shark, how long was her drop? | 10. If the whale swam to the surface, breached (leapt out of) the water, and ate the seagull, how far did he travel? |

When you wanted to find the distance between two things above sea level, what kind of equation did you write?

When you wanted to find the distance between two things below sea level, what kind of equation did you write?

When you wanted to find the distance between something that was above sea level and something below sea level, what kind of equation did you write?

To summarize (circle the correct response):

When you subtract two numbers with the same signs, you ADD / SUBTRACT.

Write an example to demonstrate:

When you subtract two numbers with different signs, you ADD / SUBTRACT.  
Write an example to demonstrate: