

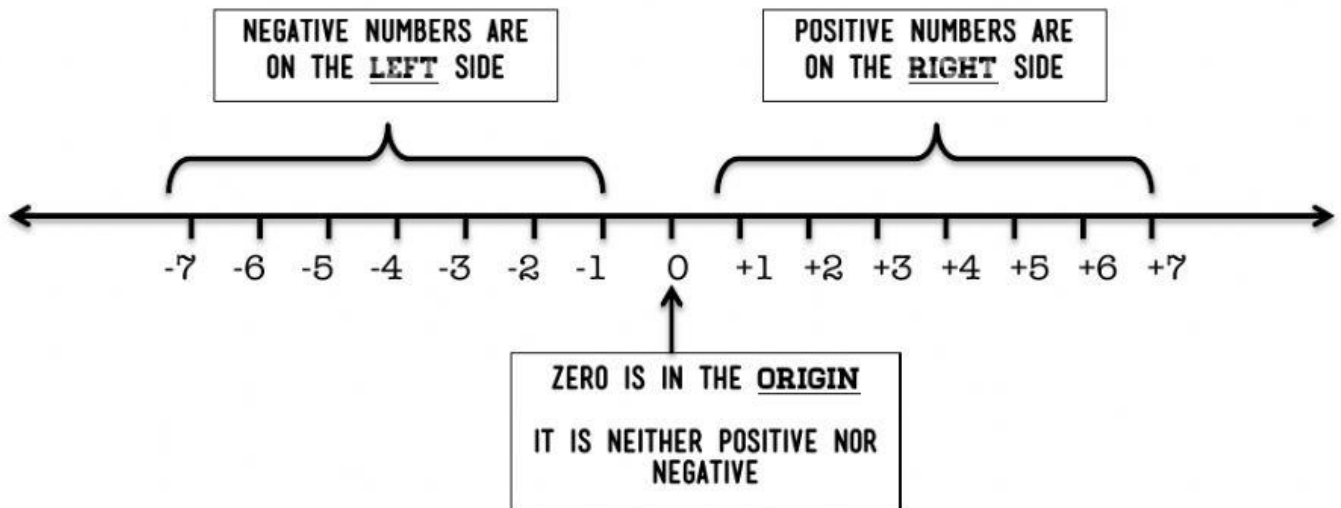
At the end of this lesson, you should be able to:

- ☐ Arrange integers on the number line
- ☐ Compare integers using the $>$ and $<$ symbols
- ☐ Apply integers in real life situations

Operations With Integers

POSITIVE AND NEGATIVE INTEGERS

The set of integers consists of **positive numbers** (+1, +2, +3, etc.), the number **zero (0)** and **negative numbers** (-1, -2, -3, etc.).



HEY! MY NUMBER HAS MORE DIGITS THAN YOURS. SO I SHOULD BE LARGER.



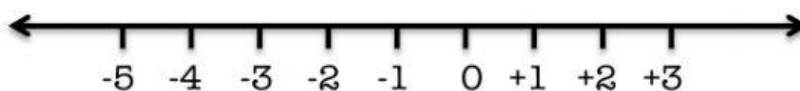
BUT MY NUMBER IS TO THE RIGHT OF YOURS ON THE NUMBER LINE. SO ITS VALUE IS GREATER.



FACT: THE VALUE OF AN INTEGER INCREASES TOWARDS THE RIGHT ON THE NUMBER LINE

Example: Fill in the box with the sign ' $>$ ' or ' $<$ '.

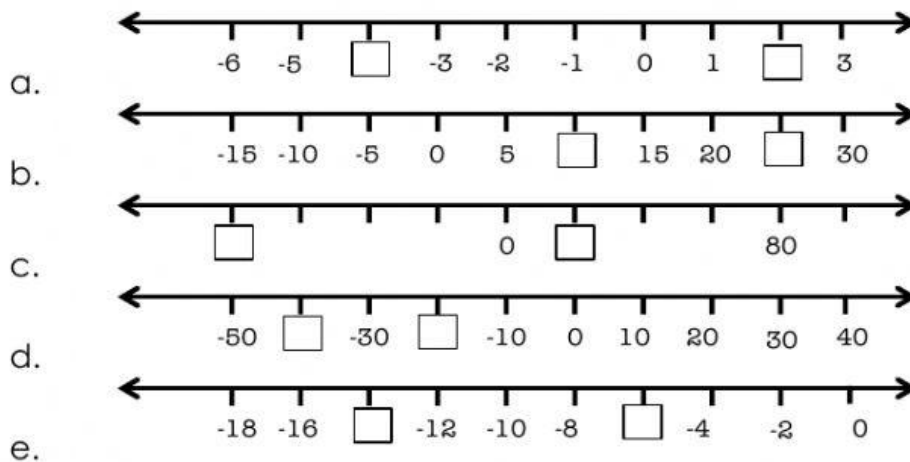
$$3 \quad \square \quad -5$$



POSITIVE AND NEGATIVE INTEGERS

EXERCISE

1. Find the missing numbers:



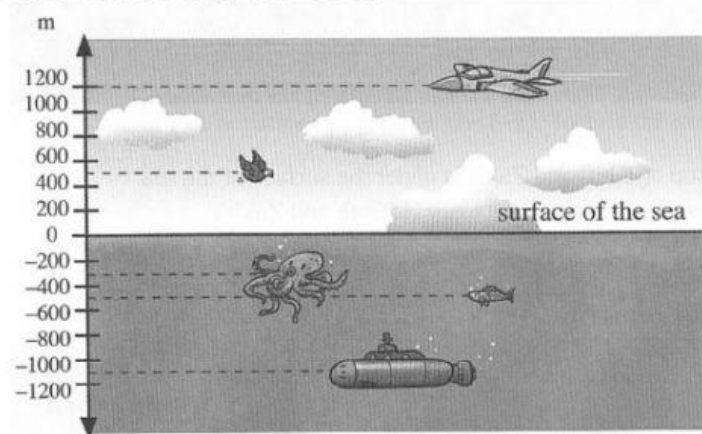
2. Use the symbol '>' or '<' to compare the integers below:

- | | |
|--------------------------------------|--|
| a. 5 <input type="text"/> - 5 | d. - 30 <input type="text"/> - 45 |
| b. - 7 <input type="text"/> 13 | e. - 7 <input type="text"/> - 70 |
| c. 14 <input type="text"/> - 20 | |

3. Arrange the integers below in ascending order:

2, -7, 5, -1, 0

4. The diagram below shows the position of various things above or below sea level. 0 marks the surface of the sea.



- What is the distance of the bird from the surface of the sea?
- What is the distance of the submarine from the surface of the sea?
- What is the distance between the fish and the bird?