

LESSON 6: VARIABLES AND THE NAMING OF VARIABLES

DEFINITION: The **Origin** is the starting point. On the **Number Line** the **Origin** is 0

DEFINITION: The **Positive Side** of the line is the side to the right of the origin.

DEFINITION: The **Negative Side** of the line is the side to the left of the Origin.

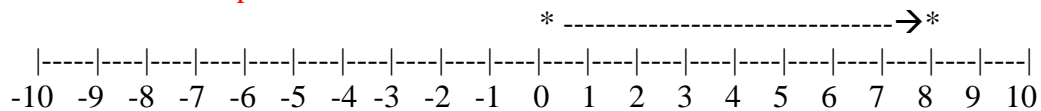
DEFINITION: To move in the **Positive Direction** is to move to the right on the number line.

DEFINITION: To move in the **Negative Direction** is to move to the left on the number line.

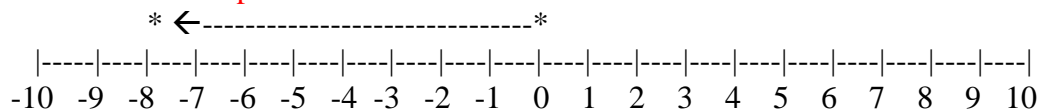
- ▶▶ **PROBLEM SET:** Draw 11 number lines and label the origin on each and 1 to 10 on the positive side and -1 through -10 on the negative side.

Represent the following using a number line:

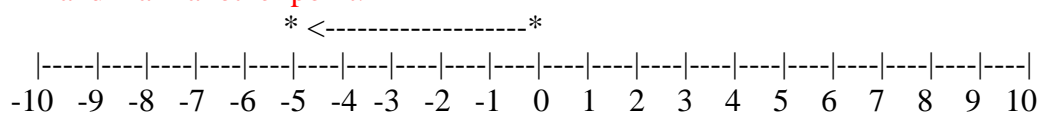
1. A gain of \$8 **Mark a Dot at 0 and then trace along the number line until 8 and mark another point.**



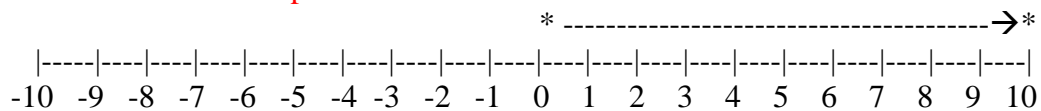
2. A loss of \$8 **Mark a Dot at 0 and then trace along the number line until -8 and mark another point.**



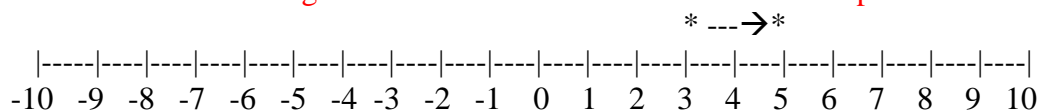
3. 5 degrees below 0 **Mark a Dot at 0 and then trace along the number line until -5 and mark another point.**



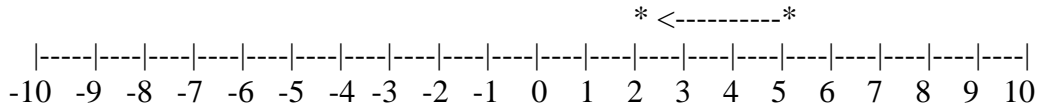
4. 10 degrees above 0 **Mark a Dot at 0 and then trace along the number line until 10 and mark another point.**



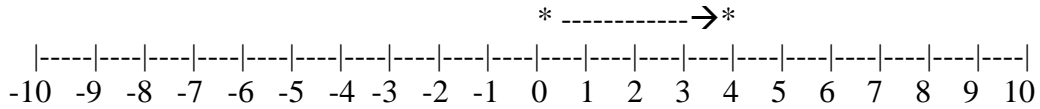
5. A bank deposit of \$2 **Say that you have \$3 in the bank at first. Mark a Dot at 3 and then trace along the number line until 5 and mark another point.**



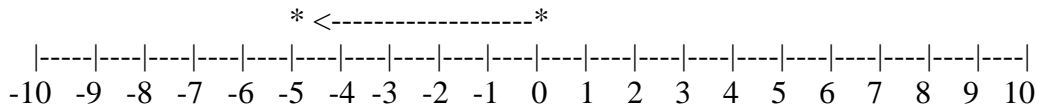
6. A bank withdrawal of \$3 Now we have \$5 in the bank. Mark a Dot at 5 and then trace along the number line until 2 and mark another point.



7. Four steps to the right Mark a Dot at 0 and then trace along the number line until -4 and mark another point.

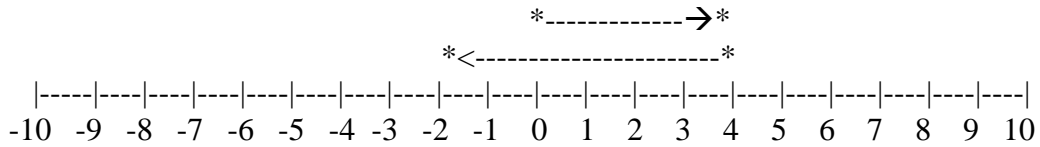


8. Five steps to the left Mark a Dot at 0 and then trace along the number line until -5 and mark another point.

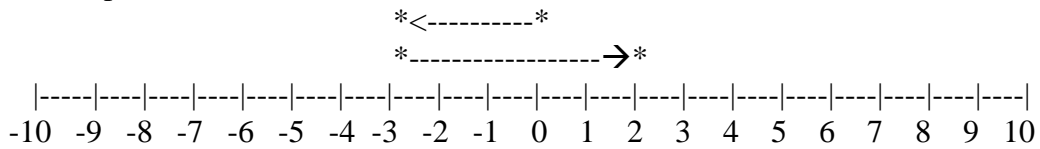


Demonstrate the following using the number line:

9. Start at the origin and move 4 units in the positive direction and then 6 units in the negative direction.



10. Start at the origin and move 3 units in the negative direction and then 5 units in the positive direction.



11. Start at the origin and move 3 units in the positive direction followed by 4 units in the positive direction.

