Absolute Value Notes

Name _____ per _____

Absolute Value	A number's distance from zero	○ | 3 | = 3 ○ | −3 | = 3

- Absolute value only asks **"how far?"**, not "in which direction?"
  - This is why absolute value is **never negative**.
- **Notation**: | *x* | ; Read as "the absolute value of *x*"
  - **Warning**: The absolute-value notation is *bars*, not parentheses or brackets.
  - **Use the proper notation**: the other notations do *not* mean the same thing.
    - It is important to note that the absolute value bars do NOT work in the same way as do parentheses.
      - -(-3) = + 3
      - -| -3 |= -3
        - I first handle the absolute value part, taking the positive and converting the absolute value bars to parentheses:
          - -| -3 | = -(+3)
        - Now I can take the negative through the parentheses:
          - -| -3 | = -(3) = -3
        - If you take the negative of an absolute value, you will get a negative number for your answer
- **Practice:**

| -8 | = 8	| 2 - 5 | = 3
| 12 | = 12	| -100 | = 100
| 5 - 2 | = 3	-| 10 | = -(10) = -10
| 0 - 6 | = 6	-| -3 | = -3
| 0 (-4) | = 0	-| 10 - 8 | = -2