

Name \_\_\_\_\_

Date \_\_\_\_\_ Pd. \_\_\_\_\_

## Notes: Solving Open Sentences involving Absolute Value

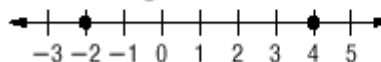
**Absolute Value Equations** When solving equations that involve absolute value, there are two cases to consider.

**Case 1:** The value inside the absolute value symbols is \_\_\_\_\_

**Case 2:** The value inside the absolute value symbols is \_\_\_\_\_

**Example 1** Solve  $|x + 4| = 1$ . Then graph the solution set.

**Example 2** Write an inequality involving absolute value for the graph.



Name \_\_\_\_\_

Date \_\_\_\_\_ Pd. \_\_\_\_\_

### Exit Card: Solving Open Sentences involving Absolute Value

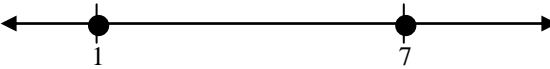


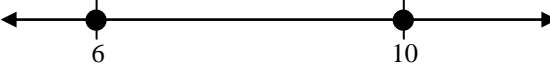

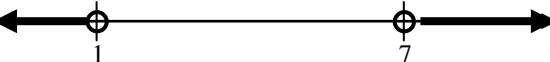
Which of the following equations represents all real numbers that are 3 units from 6?

- F.  $|x-3|=6$     G.  $|x-6|=3$     H.  $x-3=6$     J.  $x-6=3$

Name \_\_\_\_\_

Date \_\_\_\_\_ Pd. \_\_\_\_\_

**Homework: Pages 349 – 350 (14 – 27)**

14. $ x+5  \leq 3$	a. 
15. $ x-4  > 4$	b. 
16. $ 2x-8  = 6$	c. 
17. $ x+3  \geq -1$	d. 
18. $ x  < 2$	e. 
19. $ x-8  = 2$	f. 

20. The pH of a buffered eye solution must be within 0.002 of a pH of 7.3.

21. The temperature inside a refrigerator should be within 1.5 degrees of 38° F.

22. Ramona's bowling score was within 6 points of her average score of 98.

23. The cruise control of a car set at 55 miles per hour should keep the speed within 3 miles per hour of 55.

24.  $|x-5| = 8$

25.  $|b+9| = 2$

26.  $|2p-3| = 17$

27.  $|5c-8| = 12$