

Name: \_\_\_\_\_

- 1 Which equation states that the temperature,  $t$ , in a room is less than  $3^\circ$  from  $68^\circ$ ?  
(1)  $|3 - t| < 68$  (3)  $|68 - t| < 3$   
060107b (2)  $|3 + t| < 68$  (4)  $|68 + t| < 3$
- 2 What is the solution of the inequality  $|x + 3| \leq 5$ ?  
(1)  $-8 \leq x \leq 2$  (3)  $x \leq -8$  or  $x \geq 2$   
080203b (2)  $-2 \leq x \leq 8$  (4)  $x \leq -2$  or  $x \geq 8$
- 3 What is the solution of the inequality  $|y + 8| > 3$ ?  
(1)  $y > -5$  or  $y < -11$  (3)  $-11 < y < -5$   
010610b (2)  $y > -5$  (4)  $-5 < y < 11$
- 4 What is the solution of the inequality  $|2x - 5| < 1$ ?  
(1)  $x < 3$  (3)  $x > -3$   
060907b (2)  $2 < x < 3$  (4)  $x \leq 2$  or  $x \geq 3$
- 5 The solution of  $|2x - 3| < 5$  is  
(1)  $x < -1$  or  $x > 4$  (3)  $x > -1$   
080509b (2)  $-1 < x < 4$  (4)  $x < 4$
- 6 What is the solution set of the inequality  $|2x - 1| < 9$ ?  
(1)  $\{x \mid -4 < x < 5\}$  (3)  $\{x \mid x < 5\}$   
010710b (2)  $\{x \mid x < -4 \text{ or } x > 5\}$  (4)  $\{x \mid x < -4\}$
- 7 What is the solution of the inequality  $|2x - 5| \leq 11$ ?  
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- 8 What is the solution set of the inequality  $|3 - 2x| \geq 4$ ?  
(1)  $\{x \mid \frac{7}{2} \leq x \leq -\frac{1}{2}\}$  (3)  $\{x \mid x \leq -\frac{1}{2} \text{ or } x \geq \frac{7}{2}\}$   
060318b (2)  $\{x \mid -\frac{1}{2} \leq x \leq \frac{7}{2}\}$  (4)  $\{x \mid x \leq \frac{7}{2} \text{ or } x \geq -\frac{1}{2}\}$
- 9 The solution set of  $|3x + 2| < 1$  contains  
(1) only negative real numbers  
080102b (2) only positive real numbers  
(3) both positive and negative real numbers  
(4) no real numbers