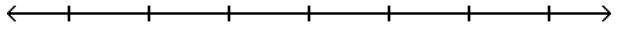
MAT1033 Practice 05 Fall of 2020

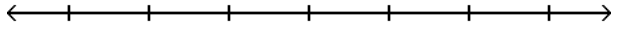
8.1 Linear Inequalities in One Variable
8.2 Compound Inequalities

Solve the inequality. Write the solution set in interval notation and graph it.

1) $6n - 9 > 5n - 1$



2) $-4 + 12t + 11 \geq 11t + 15$



Solve the inequality and write the solution set in interval notation.

3) $-11x \geq 44$ 3) _____

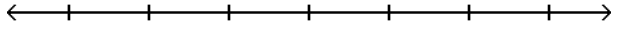
A) $(-\infty, 4]$ B) $(-\infty, -4]$ C) $[4, \infty)$ D) $[-4, \infty)$

4) $4x \leq -12$ 4) _____

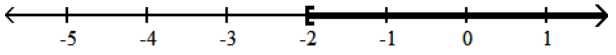
A) $[-3, \infty)$ B) $[3, \infty)$ C) $(-\infty, -3]$ D) $(-\infty, 3]$

Solve the inequality. Write the solution set in interval notation and graph it.

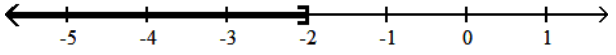
5) $18x - 12 > 3(5x - 6)$ 5) _____



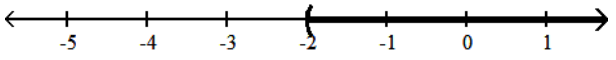
A) $[-2, \infty)$



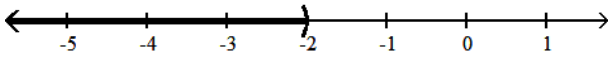
B) $(-\infty, -2]$



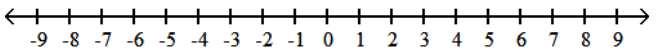
C) $(-2, \infty)$



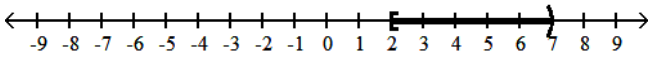
D) $(-\infty, -2)$



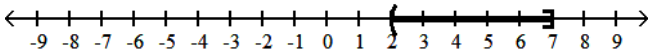
6) $10 < 5x \leq 35$ 6) _____



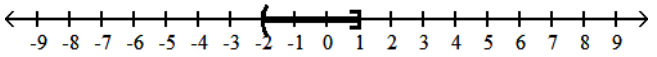
A) [2, 7)



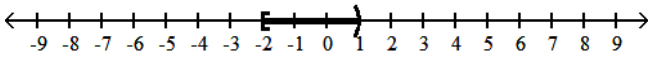
B) (2, 7]



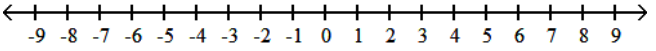
C) (-2, 1]



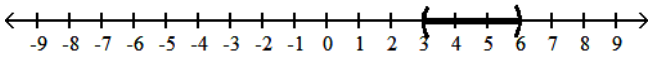
D) [-2, 1)



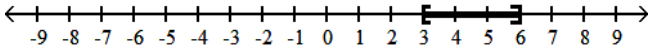
7) $7 \leq 2t + 1 \leq 13$ 7) _____



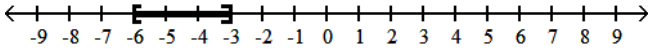
A) (3, 6)



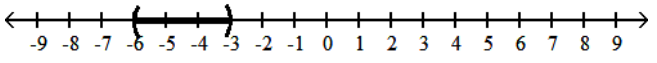
B) [3, 6]



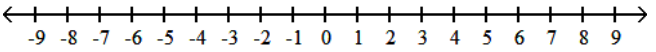
C) [-6, -3]



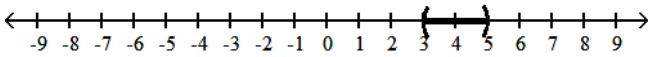
D) (-6, -3)



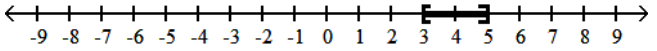
8) $-7 \le -2z + 3 \le -3$ 8) _____



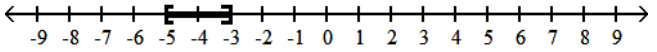
A) (3, 5)



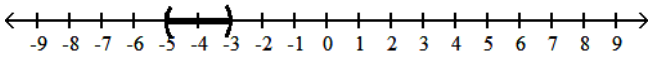
B) [3, 5]



C) [-5, -3]



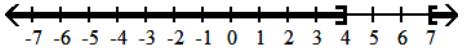
D) (-5, -3)



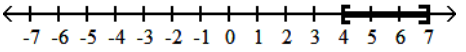
For the compound inequality, give the solution set in both interval and graph forms.

9) $x \ge 4$ and $x \le 7$ 9) _____

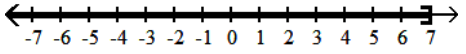
A) $(-\infty, 4] \cup [7, \infty)$



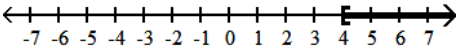
B) [4, 7]



C) $(-\infty, 7]$

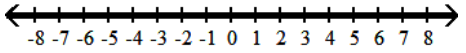


D) $[4, \infty)$

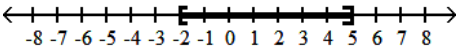


10) $x \le -2$ and $x \ge 5$ 10) _____

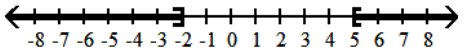
A) $(-\infty, \infty)$



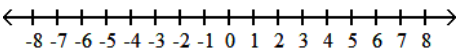
B) [-2, 5]



C) $(-\infty, -2] \cup [5, \infty)$

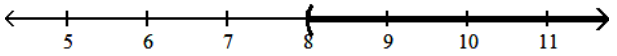


D) ϕ

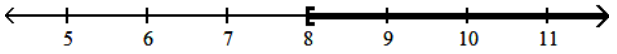


Answer Key
Testname: PRACTICE05A

1) $(8, \infty)$



2) $[8, \infty)$



3) B
4) C
5) C
6) B
7) B
8) B
9) B
10) D