ACMAT100 Fall 2023
Professor Manguba-Glover
Homework 5 (2.5)   Name: _____

Show all work and simplify all answers before circling/boxing them. If you do the problem incorrectly, or don't show sufficient work, you will be asked to rewrite the problem for credit.

Suggested due date: next class period. Final due date: the day of the Unit 2 Exam.

Solve the following inequalities and give your answers in interval notation.

(1) $-3x - 8 < 7$

(2) $-6(x - 3) > 3x - 9$

(3) $\dfrac{20}{33}x - \dfrac{1}{3} \geq \dfrac{3}{11}$

(4) $\dfrac{1}{5}x - \dfrac{23}{25} < \dfrac{7}{25}x + 1$

(5) $13 \leq 4x - 3 < 25$

(6) $10 \leq 4 - 3y < 15$

(7) $5 \leq \dfrac{3x + 1}{2} < 17$

(8) $-27 \leq -3(2x - 5) < 15$

(9) $2s + 5 < 13$ or $-4s + 3 \leq -29$

(10) $6 - x < -3$ or $4x - 3 < -3$

(11) $5x + 3 \geq 3$ and $3x - 10 \leq -1$

(12) $3x + 1 > 13$ or $4 - 3x < 10$