**Mathematics 101 Worksheet 8.1, 8.3**

Problems

1) Solve the compound inequalities. Write the solutions in interval notation.

a) $4n - 7 < 1$ and $7 + 3n \geq -8$

b) $-3y + 1 \geq 10$ and $-2y - 5 \leq -15$

c) $\frac{2}{3}t - 3 \leq 1$ or $\frac{3}{4}t - 2 > 7$

d) $5(p + 3) + 4 > p - 1$ or $4(p - 1) + 2 > p + 8$

e) $-4 \leq \frac{1}{2}(x - 1) < \frac{-3}{2}$

2) Solve the absolute value equations.

a) $16 = |x + 2| + 9$

b) $|4x - 1| + 6 = 4$

c) $|\frac{7x-3}{5}| + 4 = 4$

d) $|3x - 5| = |2x + 1|$