**Show all work for full credit! Circle your final answer.**

#1-4 Solve the following equations.

1. $-8(-8x – 6) = -6x + 38$ 2. $\frac{2x}{7}-5= 16$

 3. $-5(4k – 2) = -2(10k + 5)$ 4. $6a+3=\frac{3}{4}(8a+4)$

#5-8 Solve the following inequalities. Graph the solutions on a number line.

 5. $2x + 4 \geq 24$ 6. $9\geq \frac{3}{4}y- \frac{1}{4}y$

 7. $17.2 + 8.4y ˃ 3.4y + 5$ 8. $a – 6 \leq 15 + 8a$

#9-10 Model the problems below using either an inequality or an equation and solve.

1. The drama club is having a talent show extravaganza to raise money for the club. Tickets are $5

 in advance and $7 at the door. The drama club wants to raise a minimum of $670. If 50

 students purchased tickets in advance, how many tickets must they sell at the door?

1. Jeff and Sherri are packing boxes for Operation Christmas Child. Jeff has packed 24 boxes

 and is packing 10 boxes per hour. Sherri has packed 31 boxes and is packing 8 boxes per hour.

 In how many hours will they have packed the same number of boxes?

1. The length of one leg of an isosceles triangle is 2 times the base plus 3. If the perimeter of the triangle is 26 inches, how long is the base of the triangle? (HINT: Draw a picture)