Pre-Algebra Homework #13

1) Anna wants to go to a concert to her favorite band. She has $27.36 currently saved and her parents give her an allowance of $5.61 every week. A concert ticket costs $112. Write an equation that models this situation and then solve it to determine how many weeks Anna has to wait until she has enough money to buy her concert ticket.

2) If you roll both a fair twelve-sided and eight-sided die, what is the probability that you will roll either a 3 or 11 on the twelve-sided die and roll a 3, 4, or 5 on the eight-sided die?

3) Every day, Mrs. Gatto spends $5 on hot and delicious Starbucks coffee and $3 on a pastry. If she has budgeted $456 dollars for buying coffee and a pastry every day, write an equation that models this situation and then solve it to determine how many days she can afford to pay for coffee and a pastry until her money runs out.

4) Graph the equation $12x + 8y = -16$ using the equation of a line, identify the constant of proportionality (the slope) from the equation, and show the constant of proportionality, or slope, on the graph.

5) Ann has $350 in her bank account. If she gets paid $530 for every week that she works and she puts all of his earnings in her bank account, create an equation that models Ann's bank account balance based on the number of weeks she works. Using your equation, how much money will be in her account after one year.

6) Accurately graph the answers to $x > \dfrac{3}{5}$ on a number line.

7) Solve, and accurately graph the answers to $2x \le \dfrac{1}{3}$ on a number line.

Pre-Algebra Homework #13

8) Accurately graph the answers to $x > \dfrac{-17}{7}$ on a number line.

9) Solve, and accurately graph the answers to $\dfrac{-3}{11}x \geq \dfrac{5}{2}$ on a number line.

10) Accurately graph the answers to $-\dfrac{5}{3} < x$ on a number line.

11) Solve, and accurately graph the answers to $3x \geq \dfrac{7}{3} + \dfrac{1}{6}$ on a number line.

12) Accurately graph the answers to $x < \dfrac{-1}{7}$ on a number line.

13) Solve, and accurately graph the answers to $\dfrac{-4}{9}x \leq \dfrac{14}{3}$ on a number line.

14) Accurately graph the answers to $x < \dfrac{21}{5}$ on a number line.

15) Solve, and accurately graph the answers to $5x \leq \dfrac{10}{3}$ on a number line.

16) Accurately graph the answers to $x > \dfrac{-8}{5} + 7$ on a number line.

17) Solve, and accurately graph the answers to $\dfrac{9}{13}x \geq \dfrac{6}{5}$ on a number line.

18) Accurately graph the answers to $\dfrac{-3}{5}x > \dfrac{3}{5}$ on a number line.

19) Solve, and accurately graph the answers to $4x \leq \dfrac{16}{3}$ on a number line.

20) Accurately graph the answers to $-19x > \dfrac{-17}{5} + \dfrac{3}{2}$ on a number line.