## MATH 4: HOMEWORK 19

## March 8, 2020

- 1. Solve the following equations (collect Xs on the left, numbers on the right, follow order of operations rule i.e !parenthesis first! if applicable):
  - a. 4(2x 1) (x 4) = 49b.  $x - \frac{x}{4} - 1 = -5$ c.  $x(\frac{1}{6} + \frac{1}{15}) - 4\frac{1}{5} = 0$
- 2. A boat has speed of 8 miles per hour (mph).
  - a. Two towns, A and B, are on the shores of a lake. How long would it take the boat to go from A to B and back if the distance between the towns is 10 miles?
  - b. Two other towns, C and D, also 10 miles apart, are on a river: C is upstream, D is downstream. The river flows at the speed of 2 mph. How long will it take the boat to go from C to D? from D to C?
  - c. What is faster: going from A to B and back or from C to D and back?
- 3. Alexis bakes 25 pizzas. Each pizza can be cut either into 8 small slices or 6 large slices. How should he cut it to make 182 pieces?
- 4. Elena scores 34 points in a basketball game by making 12 baskets. If each basket was worth either 2 or 3 points, how many three-pointers did Elena make?
- 5. Using a ruler with no marks and a compass construct
  - a. perpendicular line to a given line through a point on this line



b. perpendicular line through a point outside of a line

