Simplify all answers and **show your work!**

1) Add: 4.15 + 13 + 2.9

2) Multiply: \[
\frac{31.5}{2.6}
\]

3) Divide: \[
\frac{14.84}{5.2}
\]

4) Write as a decimal: \[
\frac{9}{20}
\]

5) Round 16.6498 to the nearest: (a) tenth  (b) hundredth  (c) thousandth

6) Round $15.6568$ to the nearest cent.

7) Subtract: 45 – 26.54

8) Simplify: \[
3.5^2
\]

9) Which is the better buy?
   - 200 count box of Advil for $17.95
   - 10 count pack of Advil for $2.55

10) Solve for \(x\): \[
\frac{\frac{2}{3}}{5} = \frac{x}{9}
\]

11) Write in order from **smallest** to **largest**: 0.544, 0.524, 0.542, 0.452

12) Solve for \(x\): \[
\frac{1.2}{5.7} = \frac{2.8}{x}
\]

Write the following rates or ratios as fractions in lowest terms.

13) 8 cups to 3 quarts

14) 25 minutes to 45 minutes

15) 312 miles on 12 gallons

16) A long distance company charges $3.99 per month for its service and $0.05 per minute on long distance calls. How much will the bill be for a month where a total of 125 minutes of long distance were used?
17) If a store sells 3 cases of cola for $7, how much will 5 cases cost? Round to the nearest cent.

18) A recipe that serves 14 people uses $2 \frac{1}{2}$ cups of flour. How many cups of flour are needed for the same recipe prepared for 35 people?

19) There are 2.54 centimeters per inch. How many centimeters are there in 36 inches?

20) A roast costs $4.59 per pound. How much will a 5.6 pound roast cost?

21) Frank traveled from Augusta to Atlanta. His odometer read 25,732.6 miles at the start and 26,103.4 when he returned from the trip. He used 12 gallons of gas on the trip.
   a) How many miles did he drive on his trip? b) How many miles per gallon did his car get?

22) Jay’s checking account has $521.36 at the beginning of the month. He deposits a check for $2364.74 and writes checks for $49.95, $112.87, $21.99, $65.46, and $27.27. How much is left in his account afterwards?

23) The average rainfall in Augusta during the first 3 months of the year are 4.50, 4.11, and 4.61 inches. What is the total rainfall for those months?

24) A chemist puts a 0.322 liter of acid into test tubes that hold 0.046 liter. How many test tubes are needed?